

A SURVEY OF THE GREEK SPECIES OF *POECILIMON* FISCHER (ORTHOPTERA, ENSIFERA, PHANEROPTERINAE)

by

FER WILLEMSE

Laurastraat 67, Eindhoven, The Netherlands

ABSTRACT

Thirty-four species of *Poecilimon* are recorded from Greece. Evidence was found that the variation of some taxa is considerably larger than was understood previously. As a result some taxa are synonymized: *P. albanicus* Ramme, 1933, with *P. jonicus* (Fieber, 1853), *P. veluchianus* Ramme, 1933, with *P. chopardi* Ramme, 1933, *P. nitidus* Werner, 1932, with *P. thessalicus* Brunner von Wattenwyl, 1891, and *P. ebneri peristericus* Karaman, 1961, with *P. ebneri* Ramme, 1933. Reviewed diagnoses are given of *P. jonicus* (Fieber, 1853), *P. chopardi* Ramme, 1933, *P. zimmeri* Ramme, 1933, and *P. hoelzeli* Harz, 1966. *P. pindos* sp.n., *P. kli-suriensis* sp.n. and *P. jonicus lobulatus* sp.n. are described from the Greek mainland and *P. ikariensis* sp.n. from the Aegean island of Ikaria. First records for Europe and Greece are given of *P. anatolicus* Ramme, 1933, and for Greece of *P. hoelzeli* Harz, 1966, *P. pancici* Karaman, 1958, and *P. miramae* Ramme, 1933. Full distributional data and maps are included.

INTRODUCTION

During the examination of material of *Poecilimon* it became apparent that our knowledge of the taxonomy and distribution of the Greek species is unsatisfactory. Evidence was found that the variation in some species is considerably larger than was understood previously, which induced a renewed evaluation of the diagnostic characters of some taxa. Opportunity is taken here to give a survey of the systematics and faunistics of all Greek species of the genus.

MATERIAL AND ACKNOWLEDGEMENTS

The material on which this study is mainly based consists of 4,500 specimens representing about 30 species and preserved in the author's collection (CW). Most of this has been collected in Greece by the author in the years 1963 to 1979, always between the 1st of July and the 30th of August. Full label data (i.e. dates of capture and names of collectors) are given only of type-specimens and specimens not collected by the author. In addition 200 specimens were borrowed from the institutions listed below (abbreviations are given in parentheses): Naturhistorisches Museum, Wien (NMW); Instituut voor Taxonomische Zoölogie, Amsterdam (ITZ); Istituto Politecnico di Biologia Animale, Catania (IBA); Natuurhistorisch Museum, Maastricht (NMM); Zoologische Staatssammlung, München (ZSM).

chen (ZSM); British Museum (Natural History), London (BMNH).

For the loan of material thanks are due to A. Kaltenbach, Vienna; G. Kruseman, Amsterdam; M. La Greca and A. Messina, Catania; W. Schacht, München; D. Ragge and Mrs. L. Pitkin, London.

The collecting of material by the following persons is gratefully acknowledged here: M. C. & G. Kruseman, A. C. & W. N. Ellis and J. Duffels, all Amsterdam; L. Blommers, Rhenen; B. van Aartsen, 't Harde; J. Smid & F. Smid-Elbers, Arnhem; L. Willemse and J. Tilmans, Egyelshoven (the previous all in the Netherlands); A. Malicky, Lunz; M. Dethier and N. Doneux-Sriernet, Chavannes/R.

All measurements are given in mm.

SYSTEMATIC PART

Poecilimon Fischer 1853

Poecilimon Fischer, 1853: 225. Brunner von Wattenwyl, 1878: 36; 1882: 257; 1891: 24. Ramme, 1933: 497. Bei-Bienko, 1954: 250. Harz, 1969: 91.
Eupoecilimon Tarbinskii, 1932: 183. Ramme, 1951:
 336.

Type-species: *Poecilimon superbus* Fischer,
1853

Diagnosis. — A general diagnosis of the ge-

nus can be found in the above-mentioned literature.

Distribution. — The genus ranges from Sicily, Italy and southern Austria through the Balkans, Turkey, the southern part of the U.S.S.R. to the Caucasus, extending eastward as far as Siberia, Kazakhstan and the highlands bordering Central Asia, from Altai to Tien Shan, and southward as far as Iran and Israel.

Remarks. — About 100 species have been described. In their revision of the genus, Ramme (1933) and Bei-Bienko (1954) emphasized the diagnostic value of a large number of characters. In the course of the present study it came out that the amount of variation was not always sufficiently known and some features seem to have been weighted too excessively. This is here shown in the cases of *P. chopardi*, *P. zimmeri* and *P. jonicus*. An explanation of the high variability of some species may be found in the isolation of the diverse populations, especially of those occurring in the high mountains. In these cases we are apparently dealing with vicariant populations in which the characters change in a sometimes remarkable degree. The confusion in the systematics of some taxa is mainly due to the problem of a correct evaluation of the rate and stability of the differences, which may be difficult or impossible to understand, when related forms cannot be sufficiently studied.

In the present study the following species and subspecies are recorded from Greece:

- P. ornatus* (Schmidt, 1849)
- P. pancici* Karaman, 1958
- P. hoelzeli* Harz, 1966 (stat. nov.)
- P. pindos* sp.n.
- P. gracilis* (Fieber, 1853)
- P. obesus* Brunner von Wattenwyl, 1878
- P. beieri* Ramme, 1933
- P. nobilis* Brunner von Wattenwyl, 1878
- P. thoracicus* (Fieber, 1853)
- P. laevissimus* (Fischer, 1853)
- P. jonicus jonicus* (Fieber, 1853) (= *P. albanicus* Ramme, 1933)
- P. jonicus lobulatus* ssp.n.
- P. wernerii* Ramme, 1933
- P. tessellatus* (Fischer, 1853)
- P. macedonicus* Ramme, 1926
- P. brunneri* (Frivaldszky, 1867)
- P. pergamicus* Brunner von Wattenwyl, 1891
- P. cretensis* Werner, 1903
- P. ikariensis* sp.n.
- P. syriacus* Brunner von Wattenwyl, 1891

P. ebneri Ramme, 1933 (= *P. ebneri peristericus* Karaman, 1961)

- P. klisuriensis* sp.n.
- P. zwicki* Ramme, 1939
- P. orbelicus* Pančić, 1883
- P. miramae* Ramme, 1933
- P. anatolicus* Ramme, 1933
- P. chopardi* Ramme, 1933 (= *P. veluchianus* Ramme, 1933)
- P. zimmeri* Ramme, 1933
- P. thessalicus* Brunner von Wattenwyl, 1891
(= *P. nitidus* Werner, 1932)
- P. propinquus* Brunner von Wattenwyl, 1878
- P. aegaeus* Werner, 1932
- P. mytilensis* Werner, 1932
- P. deplanatus* Brunner von Wattenwyl, 1891
- P. sanctipauli* Brunner von Wattenwyl, 1878
- P. hamatus* Brunner von Wattenwyl, 1878.

The occurrence in Greece of *P. geoktschaicus* Shchelkanovtsev, 1910, should be omitted. *P. hadjisarandou* Werner, 1938, is considered a species incertae sedis.

Poecilimon ornatus (Schmidt, 1849)
(figs. 1—9, 199, 200, map 1)

Ephippigera ornata Schmidt, 1849: 184 (type-locality: S. Kärnten).

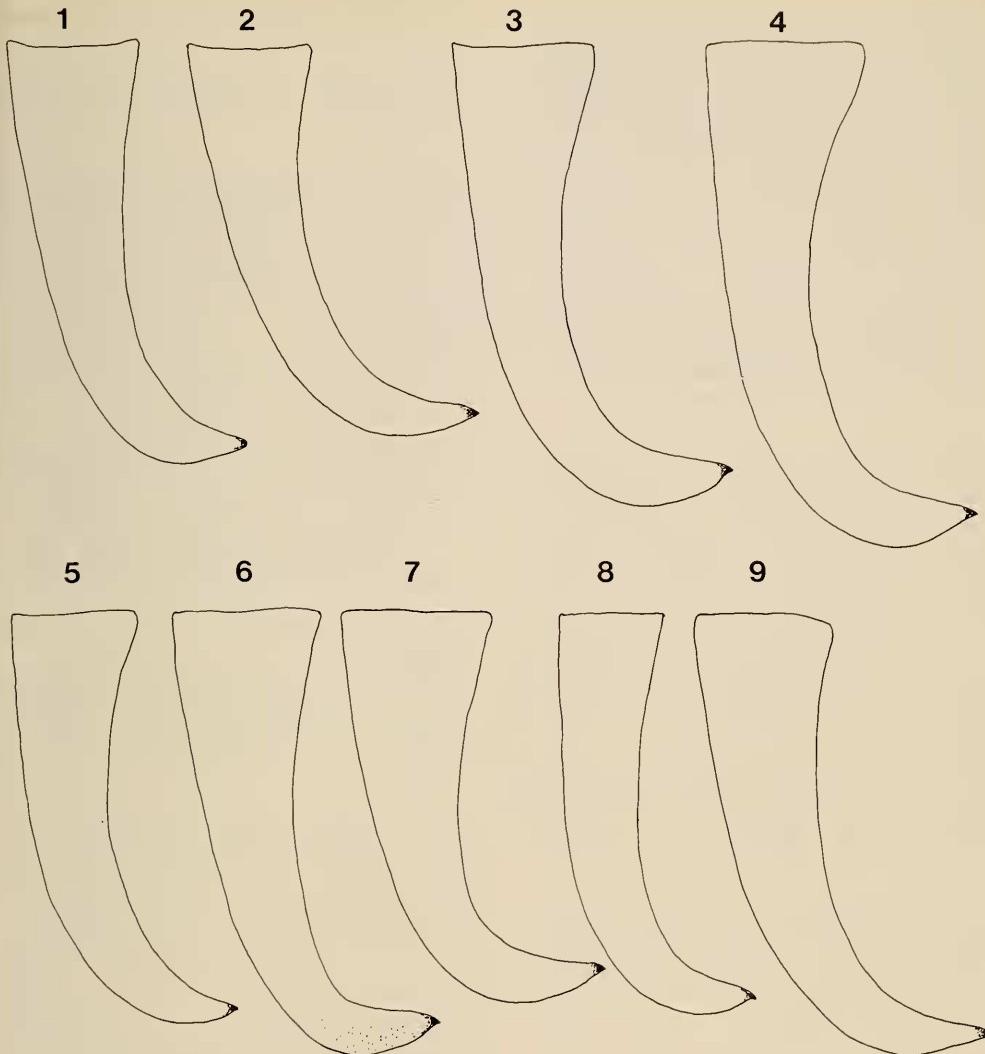
Poecilimon ornatus; Ebner, 1910: 411. Werner, 1933b: 190. Ramme, 1933: 511, pl. 6 fig. 2, pl. 7 fig. 1, pl. 8 fig. 1, pl. 11 fig. 1, pl. 12 fig. 1. Bei-Bienko, 1954: 270. Harz, 1969: 119, figs. 32, 268, 270, 271, 319, 322. Willemse, 1977: 52.

Barbitistes sieberi Fieber, 1853: 185 (type-locality: Triest).

Material studied. — Austria: Hochobir, Potschulatsattel, 1500 m, viii.1940, Ramme, 1 ♂; vii.1957, Kaltenbach, 1 ♂, 1 ♀.

Italy: Trentino, Bordala, 1200 m, 18.viii.1946, A. Galvagni, 1 ♂.

Yugoslavia: Juliske Alpe, Komna, 10.ix.1919, S. Selškar, 1 ♀; Vipava, 17.vi.1963, C. A. W. Jeekel, 1 ♂, 1 ♀; Učka, 700—1100 m, 21 ♂, 9 ♀; Igman, 4.viii.1961, S. Mikšić, 2 ♂, 2 ♀; Pr. Metaljka near Čajniče, 1300 m, 1 ♂; Mlinista, 1200 m, 1 ♂; Bare near Goražde, 800 m, 4 ♂; between Bare and Goražde, 900 m, 5 ♂, 1 ♀; Zelengora, Sutjeska, 1450 m, 1 ♀; Dragos Sedlo, Nat.Park Sutjeska, 1000 m, 10 ♂, 8 ♀; Biogradsko Jezero, 1400 m, 18.vii.1958, Deeleman, 1 ♂; between Bukovica and Šavnik, 1300 m, 1 ♂; Čakor Pass, 1700 m, 1 ♂; Pešurići, W of Višegrad, 1200 m, 1 ♂; Prevalac near Bresovica, 1300—1550 m, 13 ♂, 2 ♀; Hajla Planina, between Drelje and Pepić, 700—1400 m & Bregu i Brahimages, 1650 m, 3 ♂; Mukos Pass, Babuna R., 1040 m, 2 ♂, 4 ♀; Stepanci, Babuna R., 640 m, 1 ♀; 3 km W of Izvor, 400 m, 1 ♀; Bukovik, N of Kičevo, 900 m, 3 ♂; Staroec, S of Kičevo,



Figs. 1—9. *Poecilimon ornatus* (Schmidt), dorsal view of left male cercus. 1, Kärnten, Hochobir; 2, Trentino, Bordala; 3, Montenegro, Bukovica-Savnik; 4, Serbia, Pesurići; 5, Makedonija, Mukos Pass; 6, Makedhonía, Pisodhéri; 7, Makedhonía, Mt. Vérmon; 8, Makedhonía, Velvendós-Katafíyo; 9, Ipiros, Mt. Tzoumérka.

1000 m, 1 ♂; Krusje near Resen, 1000 m, 1 ♂; between Trepjca and Otešovo, 1500 m, 28 ♂, 20 ♀; Golešnica Planina, am Pepelak, 1800 m, vii.1936, Knipper, 1 ♂.

Greece: 2 km E of Álona, 1000 m, 1 ♂; 4 km E of Pisodhéri, 1600—1700 M, 37 ♂, 14 ♀; Vérmon Range, Mt. Bela Voda, 1700-1971 m, 12 ♂, 8 ♀; Mt. Vérnon, 6 km SW of Dhrosopiyí, 1200 m, 13 ♂, 2 ♀; Mt. Vérmon, W of Náousa, EOS refuge "Tría Piyádhia", 1350 m, 7 ♂, 1 ♀ (all CW); Kozáni, Mt. Vérmon, 1850 m, 8.viii.1973, La Greca, 6 ♂ (IBA); Mt. Piéria, 2000 m, 7.viii.1973, La Greca, 5 ♂, 4 ♀ (IBA); Mt.

Piéria, between Velvendós and Katafíyo, 1400 m, 1 ♂, 1 ♀; Mt. Piéria, 10 km NW of Ftéri, 1500 m, 1 ♀; Gávros, N of Kastoriá, 1000 m, 3 ♂; Eptakhóri, 1180 m, 10 ♂, 4 ♀; Samarína, 1600 m, 2 ♂; Mt. Smólikas above A. Paraskeví, 800—2000 m, 27 ♂, 4 ♀; Mt. Smólikas, between Foúrka and Samarína, 1500 m, 10 ♂; Métsovon, 3 km E & 3 km N, 1300—1400 m, 27 ♂, 12 ♀; Mt. Tzoumérka above Katarráktis, 1700—2100 m, 12 ♂, 13 ♀ (all CW).

Diagnosis. — See Ramme (1933), Beï-Bienko (1954) and Harz (1969).

Variation. — Some variation of the male cercus is noteworthy (figs. 1—9). Basal fold of lower ovipositor valve (figs. 199, 200) always lamelliform, protruding horizontally and slightly arched upward anteriorly, strongly and roundly impressed above and forming with the gonangulum a deep and round pit. Size and coloration highly variable. Specimens from Yugoslav and Greek Makedhonía are usually more varicoloured than those from the rest of the range. Integument of male abdomen invariably shiny.

Distribution. — The species has a wide range, which covers S Austria, NE Italy, W & C Yugoslavia, NW Greek Makedhonía, Albania and the northern half of the Píndhos range.

Greek localities. — Makedhonía: — ("Mazedonien") (Ebner, 1910; Ramme, 1933; Bei-Bienko, 1954; Harz, 1969); Flórina: Mt. Káimakchálán (Werner, 1933a); 2 km E of Álona, 1000 m; 4 km E of Pisodhéri, 1600—1700 m; Mt. Bela Voda, 1700—1971 m; 6 km SW of Dhrosopiyí, 1200 m (all Willemse, 1977); Imathía: Mt. Vérmión, W of Náousa, 1350 m (Willemse, 1977); Kozáni: Mt. Vérmión, 1850 m; Mt. Piéria, 2000 m; between Vélvendós and Katafíyo, 1400 m (Willemse, 1977); Piéria: 10 km NW of Ftéri, 1500 m (Willemse, 1977); Kastoriá: Gávros, 1000 m; Eptakhóri, 1180 m (both Willemse, 1977); Grevená: Samarína, 1600 m.

Ípiros: Ioánnina: between Fóurka and Samarína, 1500 m; Mt. Smólikas above A. Paraskeví, 800—2000 m; Métsovon, 1300—1400 m; Árta: Mt. Tzoumérka above Katarráktsis, 1700—2100 m (all Willemse, 1977). (Map 1).

Remarks. — In Greece the species may occur together with several other members of the genus, e.g. *P. hoelzeli*, *P. gracilis*, *P. jonicus jonicus*, *P. jonicus lobulatus*, *P. ebneri*, *P. chopardi*, *P. zimmeri*, *P. thessalicus*.

Poecilimon pancici Karaman, 1958 (fig. 10, map 1)

Poecilimon pancici Karaman, 1958: 36, figs. 1—7 (type-locality: Gabré bei Kumanovo). Harz, 1969: 122.

Material studied. — Greece: Mt. Pangáion above Akrovoúnió, 1250 m, 11 ♂, 4 ♀ (CW).

Diagnosis. — See original description.

Variation. — The Greek material is rather uniform, except for the male pronotum, which may be more or less raised posteriorly.

Distribution. — Hitherto known only from the type-locality Gabré in N Yugoslav Makedonija. The Greek locality indicates that the

range extends considerably more southeastward.

Greek locality. — Makedhonía: Kavála: Mt. Pangáion, 1250 m. (Map 1.)

Remarks. — The above specimens agree completely with the description of *P. pancici*. The male cercus (fig. 10) and subgenital plate, the abdominal terminalia and the pronotum in both sexes resemble *P. ornatus*. The fastigium of the vertex, however, resembles more that of *P. affinis*, being as narrow as — or often slightly narrower than — the greatest width of the scape, with parallel margins. Whether *P. pancici* represents a valid species is an open question.

The Greek specimens were found in a forest clearing near a mountain refuge, mainly on ferns and together with *P. orbelicus* and *P. anatolicus*.

Poecilimon hoelzeli Harz, 1966 (figs. 11—14, 128—130, 184—186, 201, 202, map 1)

Poecilimon ornatus; Ramme, 1951: 93 (only Mala Rupa).

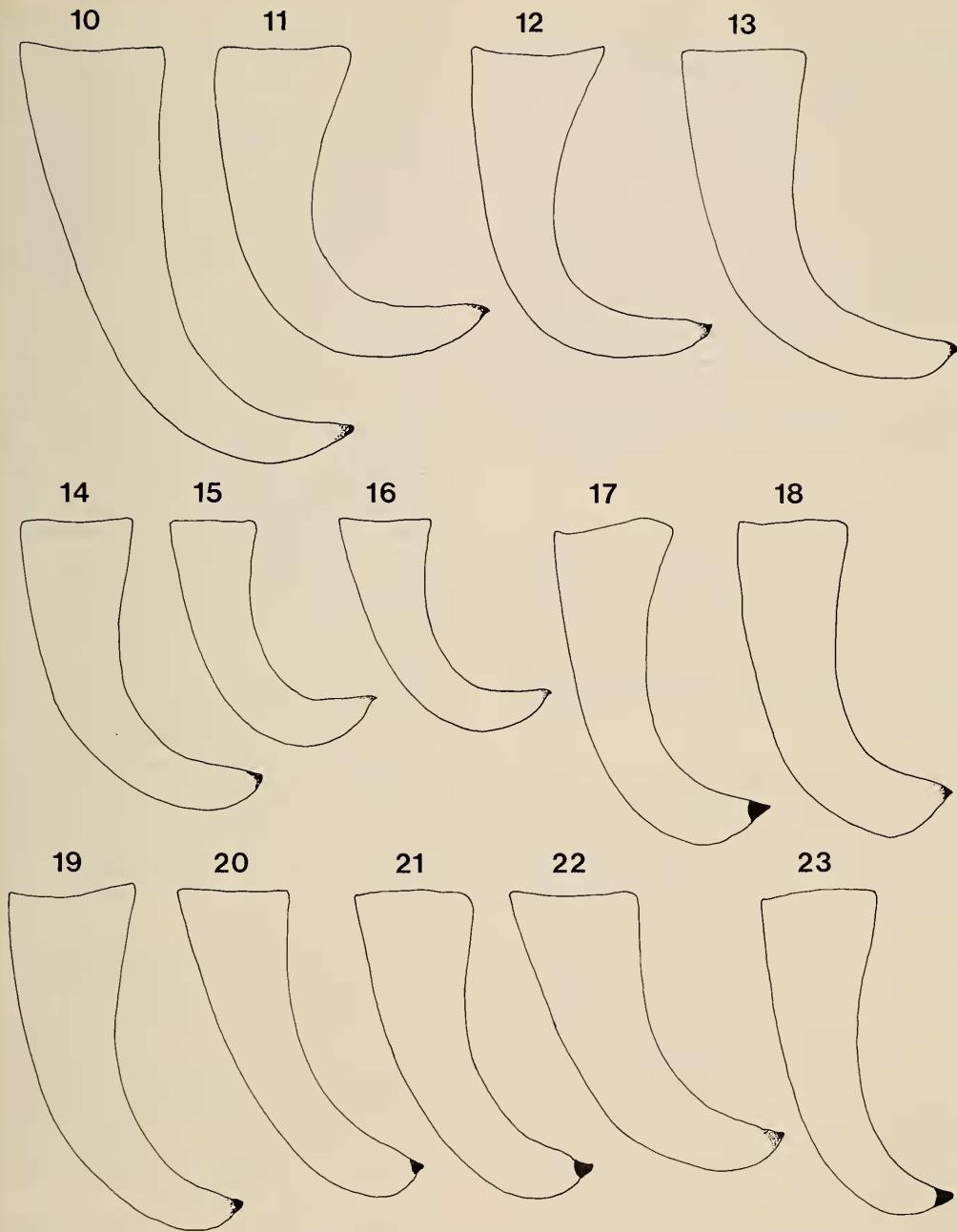
Poecilimon ornatus hoelzeli Harz, 1966: 23, figs. 10—14 (type-locality: Mala Rupa); 1969: 120, fig. 349. Harz & Kaltenbach, 1976: 331.

Poecilimon sp. aff. *ornatus*; Willemse, 1974: 352; 1977: 52.

Material studied. — Yugoslavia: ♂ holo-, ♀ paratype, labelled: Mala Rupa 1200 m, 20.vii.1917, *Poecilimon ornatus* Schm. det. W. Ramme, *Poecilimon ornatus hoelzeli* Harz det. Kurt Harz, *Poecilimon hoelzeli* Harz K. Harz Sept. 1977, type-labels (ZSM).

Greece: Mt. Ólimbos, W of Litókhoron, 1750 m, 2.viii.1965, 1 ♂, 1 ♀ & Spiliós Agápitos, 2400 m, 28.vii.—5.viii.1965, Blommers e.a., 2 ♂, 1 ♀ (ITZ); Mt. Ólimbos, Refuge A between Prióni and Mitikas, 1800—2400 m, 10 ♂, 3 ♀ & 1000—2400 m, 5 ♂, 2 ♀ & Refuge B above Sparmós, 1800—2300 m, 55 ♂, 37 ♀; Leptokariá-Kariá, 500—1000 m, 7 ♂; Mt. Piéria above Katafíyo, 1600—2190 m, 56 ♂, 33 ♀ & 15 km NW of Ftéri, 1500 m, 3 ♂; Ftéri, 1000 m, 1 ♂; 10 km SW of Dheskáti, 700 m, 1 ♂; Khrisomíléa, 900—1200 m, 2 ♂ (all CW).

Diagnosis. — Differs from *P. ornatus* as follows. Male (figs. 184, 185) of slightly smaller size; cercus (figs. 11—14) shorter, more robust over a longer distance, and more strongly incurved apically; integument of abdominal tergites dull, and yellowish bands narrower and more widely separated. Female (fig. 186) slightly smaller; basal fold of lower ovipositor valve (figs. 201, 202) with a large, knob-shaped process dorso-anteriorly.



Figs. 10—23. *Poecilimon* species, dorsal view of left male cercus. 10, *P. pancici* Karaman, Mt. Pangáion; 11—14, *P. hoelzeli* Harz; 11, Mt. Piéria, Katafyio; 12, Mt. Olimbos, Refuge B; 13, Leptokariá-Kariá; 14, Khrisomiléa; 15, 16, *P. pindos* sp. n.; 15, Mt. Tímfí; 16, Mt. Mavrovouní; 17, 18, *P. gracilis* (Fieber) (Pisodhéri); 19—22, *P. obesus* Brunner von Wattenwyl; 19, Páos; 20, Kápsia; 21, Khrisovítsi; 22, Koutsélioh; 23, *P. beieri* Ramme (holotype).

Measurements: body ♂ 21.0—31.0, ♀ 21.0—29.0; pronotum ♂ 6.0—8.3, ♀ 7.2—8.1; elytron ♂ 4.2—5.0, ♀ 0.2—2.1; hind femur ♂ 16.5—21.0, ♀ 17.2—19.1; ovipositor 14.0—16.0

Variation. — This species is as variable as *P. ornatus*.

Pronotum and male cercus as in figs. 11—14, 128—130.

Knob-shaped processus of basal fold of lower ovipositor valve always present and but slightly variable.

Distribution. — Ranges from the type-locality Mt. Kožuf ("Mala Rupa"), at the border of Yugoslav and Greek Makedhonía, southward to Mt. Piéria and Mt. Ólimbos in S Greek Makedhonía and extreme NE Thessalía; westward along S Greek Makedhonía and N Thessalía, extending into the eastern slopes of the Píndhos range.

Greek localities. — Makedhonía: Kozáni: Mt. Piéria above Katafyio, 1600—2190 m; Piéria: Mt. Piéria, 10 km NW of Ftéri, 1500 m; Ftéri, 1000 m; Mt. Ólimbos above Litókhoron, 1000—2400 m; between Leptokaria and Kariá, 500—1000 m; Grevená: 10 km SW of Dheskáti, 700 m.

Thessalía: Lárisa: Mt. Ólimbos above Sparmós, 1800—2300 m; Trikkala: Khrisomíla, 900—1200 m (partly Willemse, 1974, 1977). (Map 1.)

Remarks. — Although much resembling *P. ornatus*, the stability and importance of the distinctive characters justify its taxonomic recognition. Besides, the sympatric occurrence of *P. hoelzeli* and *P. ornatus* forms evidence of the specific status of both taxa, as was Karaman's opinion (Harz & Kaltenbach, 1976: 331).

The species was found sparsely on ferns and low shrubs of undergrowth and clearings of woodland and, more abundantly, above the timberline on diverse herbaceous plants with preference for thistles and stinging nettle. The type-locality is the Yugoslav part of Mt. Kožuf, formerly named Mala Rupa (Doflein, 1921: 96—118, figs.).

The species may occur together with *P. ornatus*, *P. thessalicus*, *P. jonicus lobulatus* and *P. chopardi*.

Poecilimon pindos sp.n.

(figs. 15, 16, 131—133, 187—189, 203, 204, map 1)

Material studied. — ♂ holotype, ♀ allotype, labelled: Hellas, Pindos Ori, Tymfi above Papikon, 1800—2000 m, 1.viii.1971, F. Willemse c.s.; paratypes: as holotype, 31 ♂, 24 ♀; Mt. Mavrovouni, N

of Metsovón, 1900—2100 m, 3.viii.1971, F. Willemse c.s., 1 ♂, 2 ♀ (all CW).

Diagnosis. — Male (fig. 187, 188). Size medium. Integument moderately shiny to dull. Fastigium of vertex sloping, margins parallel, from slightly more than half to almost as wide as greatest width of scape. Pronotum (figs. 131—133) with transverse sulcus cutting median line before middle of pronotal length; metazona strongly widening posteriorly, moderately dome-shaped, raised above tegmina; hind margin varying between very slightly convex and distinctly emarginate. Elytra well visible, apical margin reaching from just beyond fore margin to just beyond hind margin of second tergite. Hind margin of all tergites straight. Hind femur with few ventral spinules. Cercus (figs. 15, 16) short, robust, apical half regularly and strongly incurved, outer side near apex gradually narrowing into slightly recurved and downcurved apical tooth. Subgenital plate relatively short and wide, hind margin straight, postero-lateral edges slightly protruding, ventral side with weak median keel.

General colour green to yellowish green. Antennae not at all annulated. Pronotal dorsum, on either side, with a yellow lateral streak, in metazona bordered medially with rusty brown. Elytra yellowish brown, stridulatory area darker brown. Abdomen with pair of well separated yellowish dorsal bands which are often bordered with black along fore margin of tergites, forming small triangular dots both medially and laterally. Tip of cercus blackish. Legs not or finely spotted rusty brown.

Female (fig. 189). Pronotum almost cylindrical, metazona scarcely widened and raised posteriorly. Elytra overlapping dorsally, either just visible and reaching fore margin of first tergite or completely covered by pronotum. Basal fold of lower ovipositor valve (figs. 203, 204) stout, often slightly inflated anteriorly, moderately protruding horizontally and strongly arched upward anteriorly, slightly impressed above and forming with the gonangulum a shallow round pit.

Coloration green, more or less brown-spotted. Lateral pronotal streaks as in male but narrower and less conspicuous. Abdomen green, except in one specimen with yellowish bands as in male, though less sharply defined.

Measurements: body ♂ 18.0—22.5, ♀ 16.5—23.0; pronotum ♂ 5.8—7.1, ♀ 6.2—7.1; elytron ♂ 4.5—4.8, ♀ 0.1—1.0; hind femur ♂ 15.2—

16.1, ♀ 15.1—18.2; ovipositor 11.3—13.1.

Variation. — Shape of male pronotum variable (figs. 131—133), but male cercus (figs. 15—16) and other characters vary only slightly. The specimens from Mt. Mavrovouní agree completely with those of the type-locality.

Distribution. — Hitherto known only from the northern part of the Píndhos range.

Greek localities. — Ípiros: Ioánnina: Mt. Tímfi above Pápingon, 1800—2000 m; Mt. Mavrovouní near Métsovon, 1900—2100 m. (Map 1.)

Remarks. — Readily distinguished from other species of the genus except *P. affinis* (Friivaldsky, 1867). In his study of the latter species, Karaman (1974) recognized several subspecies. Fortunately I have a rich material (183 ♂, 48 ♀, CW) of *P. affinis* before me belonging to these subspecies, and moreover specimens from Bosnia-Hercegovina, central Serbia, Montenegro and Albania. The new species differs from *P. affinis* (s.l.) in smaller measurements, less shiny integument, and especially in the size and shape of the male cercus. Throughout the range of *P. affinis* (s.l.) the male cercus is uniformly much longer and less incurved apically. It would be incongruous to arrange the new taxon under *P. affinis* as now understood.

The type-locality is the stony slopes surrounding a mountain refuge above the village of Pápingon, where it occurs abundantly on heraceous plants and low shrubs, together with *P. zimmeri*. Near Métsovon it was found together with *P. ornatus*, *P. jonicus lobulatus* and *P. chopardi*.

Poecilimon gracilis (Fieber, 1853)

(figs. 17, 18, 134, 135, 205, 206, map 1)

Barbitistes gracilis Fieber, 1853: 261 (type-locality: Illyrien).

Poecilimon gracilis; Ramme, 1933: 515, pl. 6 fig. 5, pl. 8 fig. 6, pl. 11 fig. 5. Bei-Bienko, 1954: 277. Harz, 1969: 123, figs. 280, 324, 363—365. Willemse, 1977: 53.

? *Poecilimon mavrovi*; Karaman, 1958: 38, figs. 8—12. Harz, 1969: 123.

Material studied. — Austria: Obir, Hoffmannsalpe, 14.viii.1927, 1240 m, R. Ebner, 1 ♀. — Yugoslavia: Donje Bare, Nat. Park Sutjeska, 1500 m, 17 ♂, 11 ♀; Kosmet; Drelje-Pepić, 700—1400 m, 1 ♂; Mavrovi Anovi near Gostivar, 1100 m, 1 ♂; Mt. Perister, 1400 m, 31 ♂, 10 ♀. — Greece: Véronon range, Mt. Bela Voda, 1700—1971 m, 33 ♂, 28 ♀; 4 km E of Písohdéri, 1600—1700 m, 54 ♂, 11 ♀; Mt. Véronon, 6 km SW of Dhrosopiý, 1200 m, 3 ♂, 2 ♀ (all CW).

Diagnosis. — See Ramme (1933), Bei-Bienko (1954) and Harz (1969).

Variation. — The shape of the pronotum (figs. 134—135), subgenital plate and cercus (figs. 17, 18) of the male, and the coloration in both sexes, are highly variable. The number of ventral spinules on the hind femur varies from several to none and may differ even at either leg of one specimen. The basal fold of the lower ovipositor valve (figs. 205, 206) is less variable.

Distribution. — The species ranges from S Austria, W. Yugoslavia, Albania, Yugoslav Makedonija to the extreme northwestern part of Greek Makedhonía.

Greek localities. — Makedhonía: Flórina: Vérnon range: 4 km E of Písohdéri, 1600—1700 m; Mt. Bela Voda, 1700—1971 m; 6 km SW of Dhrosopiý, 1200 m (all Willemse, 1977). (Map 1.)

Remarks. — Part of the material listed above agrees with the descriptions of *P. mavrovi*. The characters of this taxon, however, seem to coincide with those seen in certain populations of *P. gracilis*. The question whether both taxa are synonymous cannot be settled here.

In Greece the species was found together with *P. ornatus*, *P. jonicus jonicus*, *P. ebneri* and *P. chopardi*.

Poecilimon obesus Brunner von Wattenwyl, 1878

(figs. 19—22, 136—138, 207, 208, map 1)

Poecilimon obesus Brunner von Wattenwyl, 1878: 38 (type-localities: Epirus and Parnass). Werner, 1929: 481. Ramme, 1933: 513, pl. 6 fig. 2, pl. 8 figs. 3, pl. 11 fig. 3, pl. 12 fig. 3, 3a—b. Werner, 1934: 324; 1938: 167. Bei-Bienko, 1954: 271. Harz, 1969: 118, figs. 269, 345—348.

Material studied. — Greece: 5 km S of Kalávrita, 750 m, 12.viii.1975, J. Duffels, 1 ♂ (ITZ); Páos, 500 m, 1 ♂; Kápsia, 750 m, 2 ♂, 1 ♀; 3 km E of Khrisovítisi, 1200 m, 1 ♂; Koutselión, 650 m, 1 ♂ (all CW).

Diagnosis. — See the description in Brunner von Wattenwyl (1878), Ramme (1933) and Harz (1969). The description of the female was incomplete. The elytra of the female widely overlap, extending beyond hind margin of pronotum and reaching first abdominal tergite. Basal fold of lower ovipositor valve (figs. 207, 208) stout, protruding downward and weakly arched upward anteriorly, latero-dorsal surface weakly impressed, forming with the gonangulum a shallow concavity.

Variation. — The fastigium of the vertex

varies from slightly wider than to twice as wide as the greatest diameter of the scape. Some variation of the male pronotum and cercus, as in figs. 19—22, 136—138.

Distribution. — Known to occur in the W and S part of the Greek mainland and the Pelopónnisos.

Localities. — Ípiros: — (“Epirus”) (Brunner von Wattenwyl, 1878; Werner, 1929; Ramme, 1933; Harz, 1969); Ioánnina: Koutselión, 650 m; Árta: Árta Ramme, 1933).

Central Greece: Voiotía: Mt. Parnassós (“Parnass”) (Brunner von Wattenwyl, 1878; Ramme, 1933; Harz, 1969).

Pelopónnisos: Korinthía: between Kórinthos and Arkh. Kórinthos (“zwischen Paläokorinth und Akrokorinth”) (Werner, 1934); Argolís: Mycenae (Ramme, 1933; Werner, 1938); Akhaia: Kalávrita (Ramme, 1933); 5 km S of Kalávrita, 750 m; Mt. Panakhaíkón (“Voidea”) (Werner, 1929); Páos, 500 m; Arkadhía: Khrisovítsi, 1200 m; Kápsia, 750 m. (Map 1.)

Remarks. — This species is an early one, adults having been collected in May and June (Werner, 1929, 1934, 1938). Apparently it disappears soon afterwards as our specimens taken in July were already dead or almost so. In the Pelopónnisos we found it together with *P. tessellatus*. From Mt. Parnassós also *P. chopardi* is known.

Poecilimon beieri Ramme, 1933 (figs. 23, 209, 210, map 1)

Poecilimon beieri Ramme, 1933: 514, pl. 6 fig. 4, pl. 8 fig. 5, pl. 11 fig. 4 (type-locality: Insel Meganisi). Ebner, 1954: 553. Harz, 1969: 120, figs. 272, 320, 350.

Material studied. — ♂ holotype, labelled: I. Meganisi, 27.v.1932, Beier, auf Disteln, *Poecilimon beieri* Ramme Ramme det., Typus; ♀ allotype, labelled: Umg. Levkas, 18—22.v.1933, Beier, *Poecilimon beieri* Ramme Ramme det., Typus (both NMW).

Diagnosis. — See the original description. Elytra of female widely overlapping. Basal fold of lower ovipositor valve (figs. 209, 210) reminding of *P. obesus*. Cercus of holotype as in fig. 23.

Variation. — Insufficiently known.

Distribution. — Known only from the Ionian islands of Meganísi and Levkás.

Localities. — Ionian Is.: Meganísi and Levkás (both Ramme, 1933; Ebner, 1954; Harz, 1969). (Map 1.)

Remarks. — The description is based on two

males and one female only, which differ from *P. obesus* merely in the width of the fastigium of the vertex. More material is needed to establish its true status.

Poecilimon nobilis Brunner von Wattenwyl, 1878

(figs. 24—26, 182, 183, 211, 212, map 1)

Poecilimon nobilis Brunner von Wattenwyl, 1878: 50 (type-localities: Athen; Taygetes), Werner, 1933a: 401, Ramme, 1933: 513, pl. 6 fig. 3, pl. 8 fig. 4, pl. 12 figs. 4, 4a, Werner, 1937b: 146, Bei-Bienko, 1954: 269, fig. 154, Harz, 1969: 118, figs. 267, 342—344.

Poecilimon holtzi Werner, 1902: 116, 2 figs. (type-locality: Kambos); 1929: 481; 1933a: 401.

Material studied. — Morea, Kambos, v.1901, Holtz, 1 ♂ (topotype of *P. holtzi*) (NMM); Spárti-Kálámai, 1200 m, 2 ♂ 2 ♀; Mt. Taíyetos, Tópitsa, 1200 m, ♀ & above Tópitsa, 1700—2000 m, 19 ♂ 2 ♀; Mt. Párnon above Vamvakóú, 1500—1935 m, 2 ♂; Mt. Aroánia above Kalávrita, 1700—2200 m, 1 ♀; Mt. Panakhaíkón above Zástova, 1000—1650 m, 1 ♂; Mt. Erímanthos above Kaléntzi, 1700—2200 m, 1 ♂ 1 ♀; Mt. Maínalon above Kardhárá, 1600—1800 m, 35 ♂ 8 ♀; 3 km W & 5 km E of Khrisovítsi, 1200 m, 1 ♂ 7 ♀; Bassae, 1000 m, 1 ♂ 1 ♀ (all CW).

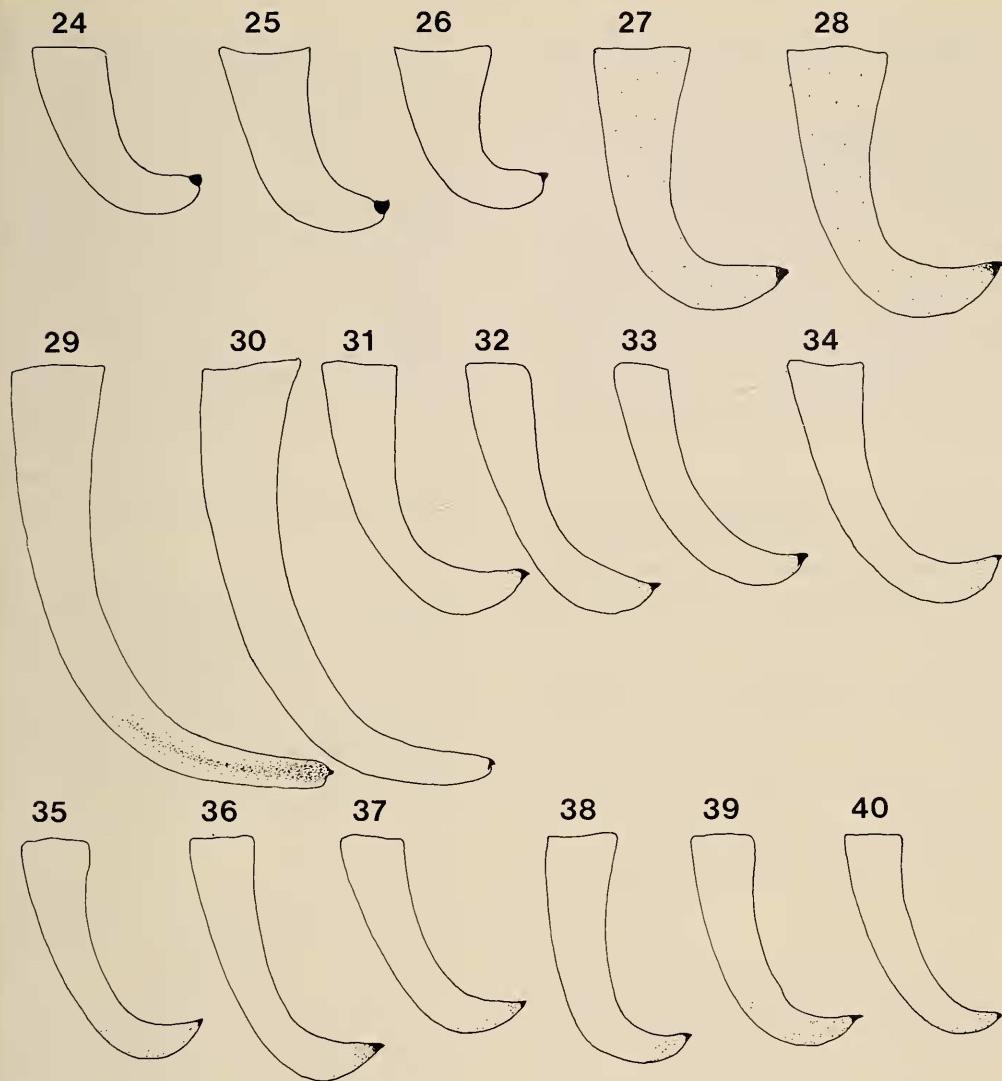
Diagnosis. — See the descriptions in Ramme (1933), Bei-Bienko (1954) and Harz (1969).

Variation. — Hind margin of last abdominal tergite of male extending arcuately to a various degree (figs. 182, 183). This character is less conspicuous or not at all developed in the female. Variation of the male cercus as in figs. 24—26. Basal fold of lower ovipositor valve (figs. 211, 212) scarcely variable. Quite vari-coloured specimens may occur. A few males and females before me have a general reddish brown colour instead of green.

Distribution. — Confined to the Pelopónnisos and the southeastern part of Central Greece.

Localities. — Central Greece: Attíki: Athínaí (“Athen”) (Brunner von Wattenwyl, 1878; Ramme, 1933).

Pelopónnisos: Korinthía: Arkh. Kórinthos (“Ebene von Paläokorinth”) (Werner, 1933a); Akhaia: Mt. Aroánia above Kalávrita, 1700—2200 m; Mt. Panakhaíkón above Zástova, 1000—1650 m; Mt. Erímanthos above Kaléntzi, 1700—2200 m; Arkadhía: Mt. Maínalon above Kardhárá, 1600—1800 m; 3 km W & 5 km E of Khrisovítsi, 1200 m; Messinía: Bassae, 1000 m; Kámboz (Werner, 1902; Ramme, 1933; Bei-Bienko, 1954); Exokhóri (“Xechori”) (Werner, 1937b); Lakonía: between Spárti and Kálámai, 1200 m; Tópitsa, 1200 m; Mt. Taíyetos (Brunner von Wattenwyl, 1878; Ramme, 1933), above Tópitsa, 1700—2200 m;



Figs. 24—40, *Poecilimon* species, dorsal view of left male cercus. 24—26, *P. nobilis* Brunner von Wattenwyl; 24, Mt. Maínalon; 25, Mt. Taiyetos; 26, Mt. Erímanthos; 27, 28, *P. thoracicus* (Fieber); 27, Túkheron; 28, Amórión; 29, 30, *P. laevissimus* (Fischer); 29, Kallithéa; 30, Áno Exánthia; 31—40, *P. jonicus jonicus* (Fieber); 31, Dhassia; 32, 33, Gazátika; 34, Perithía; 35, Asfáka; 36—37, Mt. Smólikas; 38, Albania, Korab (holotype *P. albanicus*); 39, Dhrosopiýi; 40, Mt. Perister.

Mt. Párnon above Vamvakouú, 1500—1935 m. (Map 1.)

Remarks. — With *P. obesus* and *P. beieri* it shares the shape of the basal structure of the lower ovipositor valve. It was found on diverse low shrubs and herbaceous plants both in woodland and above the timberline and may occur

cur together with *P. tessellatus*, *P. zimmeri* and *P. laevissimus*.

***Poecilimon thoracicus* (Fieber, 1853)**
(figs. 27, 28, 213, 214, map 1)

Barbitistes thoracicus Fieber, 1853: 176 (type-locality: erroneously Sicilien).

Poecilimon thoracicus; Ramme, 1933: 523: pl. 6 fig.

12, pl. 8 fig. 13, pl. 11 fig. 11, pl. 12 fig. 8. Bei-Bienko, 1954: 295, fig. 171. Harz, 1969: 124, figs. 284, 330, 366—368.

Material studied. — Romania: Domogled, 1600—1800 m, 10.ix.1941, Ramme, 1 ♂, 1 ♀.

Yugoslavia: Bare, near Goražde, 800 m, 1 ♂, 1 ♀; Donje Bare, Nat. Park Sutjeska, 1500 m, 12 ♂, 21 ♀; Laniste near Bagrdan, 100 m, 11 ♂, 15 ♀; V. Dulica, near Džigolj, 1400 m, 5 ♂, 6 ♀; Pešurići, W of Višegrad, 1200 m, 10 ♂, 12 ♀; Hajla Planina, Drelje-Pepić, 700—1400 m & above Pepić, 1100—1500 m, 24 ♂, 7 ♀; Prevalac, near Brezovica, 3 ♂; Mt. Bistra, Prevalac, 1600—1900 m, 3 ♂, 3 ♀; Žabljak, 1400 m, 9 ♂, 6 ♀; Ljuboten, N of Tetovo, 1000 m, 9 ♂, 6 ♀; Vratnica, N of Tetovo, 2 ♂.

Albania: Pastrik, 26.viii.1918, Ebner, 1 ♂. — Greece: Amórión, 40 m, 1 ♂, 1 ♀; Tukherón, 40 m, 1 ♂, 3 ♀ (all CW).

Diagnosis. — See the descriptions in Ramme (1933), Bei-Bienko (1954) and Harz (1969).

Variation. — Throughout its range the variation is remarkably slight. Male cercus and basal fold of lower ovipositor valve as in figs. 27, 28, 213, 214.

Distribution. — From Romania and Yugoslavia to Albania and Bulgaria, extending into N Greece.

Greek localities. — Thráki: Évros: Tukherón, 40 m; Amórión, 40 m. Makedhonía: (Bei-Bienko, 1954; Harz, 1969).

Ípiros: (Harz, 1969).

Ionian Is.: Kérkira ("Corfu") (Bei-Bienko, 1954). (Map 1.)

Remarks. — Confirmation of its occurrence in the area extending from western Greek Thráki to Ípiros is needed. In Amórión (Thráki) the species was found together with *P. zwicki*.

Poecilimon laevissimus (Fischer, 1853) (figs. 29, 30, 215, 216, map 2)

Odontura laevissima Fischer, 1853: 225, pl. 12 figs. 5, 5+, 5a (type-locality: Messina, Sicilia).

Poecilimon laevissimus; Ramme, 1933: 533, pl. 6 fig. 21, pl. 8 fig. 25, pl. 11 fig. 19, pl. 12 fig. 16; 1939: 46. Ebner, 1954: 553. Harz, 1969: 137, figs. 288, 326, 420—423. Willemse, 1977: 53.

Material studied. — Greece: Levkás, Áno Exánthia, 600 m, 4 ♂, 2 ♀; Zákynthos, S of Á. Nikólaos, 140 m, 2.vi.1977, A. Malicky, 3 ♂; Kallithéa, S of Lidhoríkion, C. Greece, 100 m, 18.vi.1979, J. Smid & F. Smid-Elbers, 1 ♂, 1 ♀; Ilia, Kallithéa, 400 m, 9 ♂, 6 ♀; Bassae, 1100 m, 11 ♂, 10 ♀; Karitaina, 500 m, 1 ♀; Kámberos, 400—700 m, 3 ♂, 2 ♀; Tópitsa, 1200 m, 8 ♂, 10 ♀ (all CW).

Diagnosis. — See the description in Ramme (1933, 1939) and Harz (1969). The basal fold of the lower ovipositor valve (figs. 215, 216) was not yet described: strong, well protruding horizontally and strongly arched upward anteriorly, broadly and strongly impressed from above and forming with the gonangulum a large deep round pit. Female subgenital plate divided by a deep and wide impression separating a pair of bulbous, roughly semi-circular lobes.

Variation. — The Greek material is comparatively uniform. The male cercus (figs. 29, 30) varies slightly in length. Colour of female ranging from uniform green to as distinctly variegated as in male. Rusty brown dorsal spots of first and second abdominal tergites of male invariably present.

Distribution. — Known from Sicilia, some Ionian islands, Central Greece and the western part of the Pelopónnisos.

Greek localities. — Ionian Is.: Meganísi (Ramme, 1933; Ebner, 1954; Harz, 1969); Levkás: Nidhrón ("Nidri") (Ebner, 1954; Harz, 1969); Áno Exánthia 600 m (Willemse, 1977); Zákynthos: 2 km N of Zákynthos ("Zante") (Ramme, 1939; Harz, 1969); S of Á. Nikólaos, 140 m. Central Greece: Fókis: Kallithéa, 100 m. Pelopónnisos: Ilia: Kallithéa, 400 m; Bassae, 1100 m; Arkadhía: Karitaina, 500 m; Messinía: Kámberos, 400—700 m; Lakonía: Tópitsa, 1200 m (all Willemse, 1977). (Map 2.)

Remarks. — Ramme found the species on *Astragalus* (Zákynthos). We collected it on various low shrubs, e.g. *Rubus*, *Quercus*. In Bassae and Tópitsa (both in the Pelopónnisos) the species occurred together with *P. nobilis*.

Poecilimon jonicus Fieber, 1853

Among our rich material two forms could be recognized, differing in the shape of the basal fold of the lower ovipositor valve. One of these forms agrees with both *P. jonicus* and *P. albaniensis*, which therefore are considered conspecific, while the other is described below as a new subspecies.

Poecilimon jonicus jonicus (Fieber, 1853) (figs. 31—40, 139—144, 170—172, 217, 218, map 2)

Barbitistes jonicus Fieber, 1853: 175 (type-locality: Corfu).

Poecilimon jonicus; Brunner von Wattenwyl, 1878: 49 (partim). Harz, 1969: 131, figs. 278, 325, 395—397 (not Pelopónnisos).

Poecilimon jonicus; Brunner von Wattenwyl, 1882: 260 (partim). Ramme, 1933: 529, pl. 8 fig. 21, pl.

11 fig. 17, pl. 12 fig. 12 (partim). Bei-Bienko, 1954: 294 (not *Peloponnissos*).

Poecilimon albanicus Ramme, 1933: 531, pl. 6 fig. 19, pl. 8 fig. 23, pl. 12 fig. 14 (type-locality: Korab, Albania). Karaman, 1958: 41, figs. 18—21. Harz, 1969: 130, figs. 294, 386—389. *Syn. nov.*

Material studied. — Albania: Alban. Exp. 1918, Korab, 23—31.vii., *Poecilimon albanicus* Rme Ramme det., Typus, 1 ♂, 1 ♀ (♂ holotype, ♀ allotype of *Poecilimon albanicus*) (NMW).

Yugoslavia: Makedonija: Staroec, S of Kičovo, 1000 m, 11 ♂, 6 ♀; Krusje near Resen, 1000 m, 4 ♂, 3 ♀; 10 km E of Resen, 1100 m, 7 ♂, 6 ♀; Trepča-Oteševvo, 1100 m, 16 ♂, 12 ♀; Mt. Perister, 1100 m & 1400 m, 19 ♂, 13 ♀ & 1800—2000 m, 31.vii.1965, Ent. Exc. Zoöl. Mus. Amsterdam, 2 ♂, 2 ♀.

Greece: Mt. Vérmion, refuge Tría Pigádhia, W of Náousa, 1350 m, 1 ♂, 2 ♀; Seli, near refuge Mt. Vérmion, 1600 m, 1 ♀ (all CW); Kozáni, Mt. Vérmion, 1850 m, 8.viii.1973, La Greca, 4 ♂, 4 ♀ (IBA); 2 km E of Álona, 1000 m, 1 ♂, 3 ♀; 6 km SW of Dhrosopiyí, 1200 m, 58 ♂, 40 ♀; Mt. Vérnon, Polipótamos, 1100 m, 9 ♂, 4 ♀; Eptakhóri, 1180 m, 18 ♂, 9 ♀; Lithia, lake Kastoriá, 700 m, 1 ♂, 2 ♀; Fóurka, 1400 m, 6 ♂, 5 ♀; Mt. Smólikas above Á. Paraskeví, 800—2100 m, 37 ♂, 22 ♀; Elevtherón, 1000 m, 7 ♂, 2 ♀; Kónitsa-Elevthérion, 1200 m, 2 ♂; Arísti-Pápingon, 450 m, 9 ♂, 6 ♀; Pápingon, 1000 m, 14 ♂ 2 ♀; Kalpákion, 400 m, 1 ♂, 1 ♀; Asfáka, 500 m, 3 ♂, 1 ♀; Kérkira (topotypes of *P. jonicus*): Dhassia, 5 km SE of Korakiána, 16—30.v.1971, B. v. Aartsen, 1 ♂; Períthia, 450 m, 8 ♂, 5 ♀; Lake Antinioúti, 0 m, 3 ♀; Tsáki, 10 m, 4 ♂, 3 ♀; Livádhia plain, 10 m, 1 ♂, 1 ♀; Láfkion, 100 m, 1 ♀; Petália, 500 m, 2 ♂, 1 ♀; Gazátika, 20 m, 10 ♂, 10 ♀ (all CW).

Diagnosis. — Male. Size medium to small. Integument shiny. Pronotum (figs. 139—144) long, not at all saddle-shaped, not or scarcely widened posteriorly, metazona very slightly raised and scarcely bulbously inflated, lower margin of lateral lobe from widely rounded to scarcely S-shaped posteriorly. Elytra extending beyond hind margin of pronotum, reaching middle of first tergite or slightly longer. Cercus (figs. 31—40) slender, slightly narrowing distally, sometimes with a slight pre-apical widening; distal half more or less evenly incurved, cylindrical but at inner side of incursion slightly flattened, outer side of apex roundly narrowing into a simple acute tip or tooth. Subgenital plate (figs. 170—172) longer than wide, with an obtuse median and a pair of lateral keels, margins converging posteriorly toward narrow, transverse or weakly concave hind margin, postero-lateral edges slightly or not produced.

General colour yellowish, yellowish-green or green, more or less spotted with dark brown or

black. Antennae finely annulated. Pronotal dorsum of general colour, or often more or less rusty brown with on either side a yellow lateral line. Elytron of general colour, stridulatory part sometimes darker brown. Abdomen with more or less developed black median band, composed of a pair of black dots along fore margin of tergites, the dots extending posteriorly without reaching hind margin of tergites and always separated from each other by a yellow median line. Lateral side of abdomen more or less spotted black, without forming a true black lateral band. Cercus brown, often blackish or dark brown apically. Lower outer keels of all femora black, upper side of fore and middle femora and upper and outer side of hind femur often with a black line.

Female. Integument less shiny than in male, though not dull. Pronotum almost cylindrical, lower margin of lateral lobe from straight to weakly rounded posteriorly, not S-shaped. Elytra widely overlapping, usually extending well beyond hind margin of pronotum. Basal fold of lower ovipositor valve (figs. 217, 218) thin, lamelliform, distinctly protruding horizontally, arched upward anteriorly and not or scarcely inflated, roundly impressed from above and forming with the gonangulum a distinct round pit.

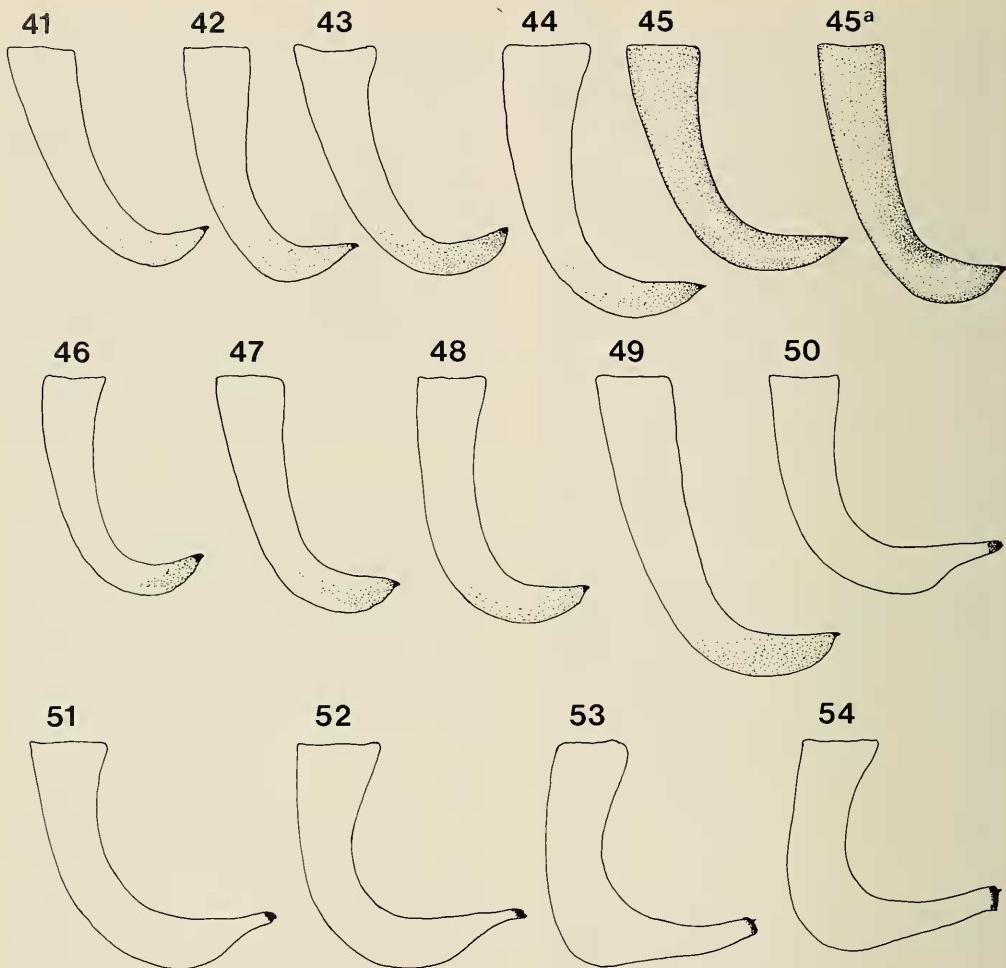
Coloration as in male, more often less brightly so or even completely uniform. Ovipositor in rather varicoloured specimens with a black dorso-lateral spot.

Measurements: body ♂ 13.5—20.0, ♀ 13.0—22.0; pronotum ♂ 4.3—5.7, ♀ 5.0—6.3; elytron ♂ 1.7—2.1, ♀ 0.6—1.7; hind femur ♂ 15.0—18.6, ♀ 16.1—19.1; ovipositor 8.4—10.2.

Variation. — A highly variable species. Male cerci, including those of topotypical specimens, often not widened preapically (figs. 31—40). Size and shape of pronotum and subgenital plate of male (figs. 139—144, 170—172) rather variable. Specimens from the western part of the range viz. from the Ionian island of Kérkira and the lowlands of Ípiros are large and brightly coloured, while those from the eastern part are smaller and less conspicuously coloured.

Distribution. — The range of the nominate subspecies extends from Dalmatia, Montenegro, Albania and SW Yugoslav Makedonija to NW Greek Makedhonía, the northern part of the Píndhos range and Ípiros, and reaches the Ionian island of Kérkira.

Greek localities. — Makedhonía: Ímathia: Mt. Vérmion, mountain refuge of Seli, 1600 m; Mt. Vérmion,



Figs. 41—54. *Poecilimon* species, dorsal view of left male cercus. 41—44, *P. jonicus lobulatus* ssp. n.; 41, Mt. Mavrovoúni; 42, Khrisomíléa; 43, Rámia-Livádhion; 44, Nikópolis; 45, *P. wernerii* Ramme (Lekhaína) (for comparison 45a, *P. jonicus jonicus* (Fieber), Gazátika); 46—49, *P. tessellatus* (Fischer); 46, Ipsóús; 47, Mt. Aroánia; 48, Mt. Mainalon; 49, Mt. Panakhaíkón; 50—52, *P. macedonicus* Ramme; 50, Litókhoron; 51, 52, Mt. Kholomón; 53, 54, *P. brunneri* (Frivaldszky); 53, Titov Veles; 54, P. Pletvar.

refuge Tría Pigádhia, W of Náousa, 1350 m; Kozáni: Mt. Vérmon, 1850 m; Flórina: 2 km E of Álona, 1000 m; Mt. Vérnon, 6 km W of Dhrosopiyí, 1200 m & olípotámos, 1100 m; Kastoria: Lithía, along Lake Kastoría, 700 m; Eptakhóri, 1180 m.

Ípiros: — ("Epirus") (Brunner von Wattenwyl, 1878, 1882; Ramme, 1933; Bei-Bienko, 1954; Harz, 1969); Ioánnina: Fóurka, 1400 m; Mt. Smólikas above Á. Paraskeví, 800—2100 m; Elevtherón & between Elevtherón and Kónitsa, 1000 & 1400 m; between Arísti and Pápingon, 450 m; Pápingon, 1000 m; Kalpákion, 400 m; Asfáka, 500 m.

Ionian Is.: Kérkira: — ("Corfu") (Fieber, 1853;

Brunner von Wattenwyl, 1878, 1882; Ramme, 1933; Bei-Bienko, 1954; Harz, 1969); Dhassia; Perithía, 450 m; Lake Antinoti, 0 m; Petália, 500 m; Láfkiion, 100 m; Livádhí plain, 10 m; Tsáki, 10 m; Gazátika, 20 m. (Map 2.)

Remarks. — Specimens from the mountains agree with *P. albanicus*, those from the island of Kérkira with *P. jonicus*, while the rest of the material is intermediate. Presumably *P. jonicus* is a highly variable species and *P. albanicus* merely represents the mountain form of the for-

mer. I consider both taxa conspecific and propose to synonymize *P. albanicus* Ramme, 1933, with *P. jonicus* (Fieber, 1853). From the original description of *P. ghigii* Salfi, 1937, it seems probable that this is another synonym of *P. jonicus*. This cannot be confirmed in the absence of the types.

Few records from the Pelopónnisos under the name *P. jonicus* (Ramme, 1933; Harz, 1969) are assigned in this study to *P. tessellatus*.

The species lives from the lowlands up to above the timberline. We found it, often abundantly, in diverse habitats, e.g. hedges, open grassland, woodland clearings and lush meadows. It occurs on low bushes and herbaceous plants, such as thistles, ferns, stinging nettle, *Verbascum*, *Sambucus*, *Rubus* and many others. In Greece it may occur together with other members of the genus e.g. *P. ornatus*, *P. gracilis*, *P. chopardi*, *P. ebneri*.

Poecilimon jonicus lobulatus subsp. nov.
(figs. 41—44, 145—150, 190—192, 219—222,
map 2)

Material studied. — ♀ holotype, ♂ allotype, labelled: Hellas, Ep. Dhadhónis, 8 km N of Kaléntzion, 950 m, 22.vii.1976, F. & L. Willemse & J. Tilmans (CW); paratypes: Arísti, 700 m, 2.viii.1973, M. La Greca, 2 ♂, 1 ♀ (IBA); Mt. Mitsikélí above Lingiádhes, 850—1650 m, 3.viii.1978, F. Willemse, 1 ♂, 2 ♀; Métsovon, 3 km E, 1300 m, 25 ♂, 11 ♀ & 6 km E, 1500 m, 5 ♂, 3 ♀, 9.viii.1966, F. Willemse c.s. & J. Scherbepier, & 5—10 km N, 1600 m, 3.viii.1971, F. Willemse c.s., 31 ♂, 15 ♀ & 3 km N, 1400 m, 11.vii.1976, F. & L. Willemse & J. Tilmans, 14 ♂, 13 ♀ (all CW); Métsovon, 1600 m, 1.viii.1973, M. La Greca, 9 ♂, 5 ♀ (IBA); Mt. Mavrovouní near Métsovon, 1600—2100 m, 3.viii.1971, F. Willemse c.s., 11 ♂, 6 ♀; Khrisomiléa, 900—1200 m, 10.vii.1976, 24 ♂, 14 ♀; as holotype, 16 ♂, 15 ♀; Miléa-Sgára, 600 m, 25.vii.1976, 1 ♂; Miléa-Katarráktis, 750 m, 25.vii.1976, 2 ♂, 2 ♀; Mt. Tsoumérka above Katarráktis, 850—2100 m, 23—24.vii.1976, 10 ♂, 5 ♀; Rámia-Livádhion, 500 m, 25.vii.1976, 21 ♂, 15 ♀; Nikópolis, 0—50 m, 13.vii.1976, 34 ♂, 26 ♀ (all F. & L. Willemse & J. Tilmans) (all CW).

Diagnosis. — Differs from the nominate subspecies in the female only: basal fold of lower ovipositor valve bulbously inflated anteriorly, forming a large round processus (figs. 190—192, 219—222).

Measurements: body ♂, 13.0—22.0, ♀ 17.0—22.5; pronotum ♂ 4.2—6.3, ♀ 4.5—7.2; elytron ♂ 1.1—2.5, ♀ 0.1—1.6; hind femur ♂ 14.1—19.8, ♀ 14.1—21.0; ovipositor 8.2—11.0.

Variation. — Most of the characters, e.g. size,

coloration, length of elytra in both sexes, shape of the pronotum (figs. 145—150), subgenital plate and cercus (figs. 41—44) of the male, are as variable as in the nominate subspecies. Large and brightly coloured specimens are from the lowlands, while those from the high mountains are smaller and less brightly coloured. The processus of the basal fold of the lower ovipositor valve presents some clinal variation, being conspicuously more developed in southern populations than in northern ones (figs. 219—222).

Distribution. — The range of the subspecies adjoins that of the nominate subspecies and covers the central part of the Píndhos range, extending into S. Ípiros.

Localities. — Ípiros: Ioánnina: Arísti, 700 m; Mt. Mitsikélí above Lingiádhes, 850—1650 m; surroundings of Métsovon, 1300—1600 m; Mt. Mavrovouní near Métsovon, 1600—2100 m; 8 km N of Kaléntzion, 950 m; Árta: between Miléa and Sgára, 600 m; between Miléa and Katarráktis, 750 m; Mt. Tsoumérka above Katarráktis, 850—2100 m; between Rámia and Livádhion, 500 m; Préveza: Nikópolis, 900—1200 m.

Thessalía: Tríkkala: Khrisomiléa, 900—1200 m. (Map 2.)

Remarks. — While the female may be readily distinguished from both the nominate subspecies and other species resembling *P. jonicus*, the males of both subspecies are indistinguishable.

P. jonicus lobulatus occurs from the lowlands up to above the timberline in similar habitats as the nominate form. It may occur together with *P. chopardi*, *P. zimmeri*, *P. ornatus*, *P. pindos* and *P. hoelzeli*.

Poecilimon wernerii Ramme, 1933
(figs. 45, 151, 152, 223, 224, map 2)

Poecilimon wernerii Ramme, 1933: 530, pl. 6 fig. 18, pl. 7 fig. 7, pl. 8 fig. 22, pl. 11 fig. 18 (type-locality: Agrínion). Harz, 1969: 135, figs. 295, 410—414.

Material studied. — Ilía, Lekhaína, 50 m, 3 ♂, 1 ♀ (CW).

Diagnosis. — See the original description. The basal fold of the lower ovipositor valve, hitherto not described, is thin, lamelliform, protruding horizontally, slightly arched upward anteriorly, weakly impressed from above and forming with the gonangulum a shallow concavity (figs. 223, 224).

Variation. — Insufficiently known by lack of material. Male pronotum variable, as shown in

figs. 151—152. The ovipositor of the female studied lacks a black spot and is unicoloured.

Distribution. — Known only from the type-locality, Agrinio in western central Greece and from Lekhaína, western Pelopónnisos. (Map 2.)

Remarks. — This species differs from *P. jonicus* in the male cercus and the basal fold of the lower ovipositor valve. While the cercus in *P. jonicus* is slightly flattened at the inner side of the incurvation (fig. 45a), in *P. wernerii* it is not at all flattened but perfectly cylindrical (fig. 45). Basal fold of lower ovipositor valve in both subspecies of *P. jonicus* distinctly more impressed from above than in *P. wernerii*, in *P. jonicus lobulatus* moreover with a large anterior processus. The distinction between *P. wernerii* and *P. tessellatus* refers to the same characters, and also to the pronotum, which is appreciably more inflated posteriorly in the latter.

We found this species on a hedge bordering cultivated land along the highway just north of the village of Lekhaína.

Poecilimon tessellatus (Fischer, 1853)
(figs. 46—49, 153—155, 225, 226, map 2)

Odontura tessellata Fischer, 1853: 227, pl. 12 figs. 7, 7a-b (type-locality: erroneously Ticino, Helvetia).
Poecilimon tessellatus; Ramme, 1933: 575. Harz, 1964: 447, figs. 11—17; 1969: 136, figs. 290—291, 415—417.

Poecilimon walteri Werner, 1937b: 145, figs. 3—4 (type-locality: Mykenä); 1938: 166, fig. 3.

Poecilimon jonicus; Werner, 1927: 428. Ramme, 1933: 529 (partim).

Poecilimon spec.; Ebner, 1912: 109.

Material studied. — Greece: Attika, 1858—1862, Heldreich, 1 ♂; Póros I., 1870, Heldreich, 1 ♂; Mt. Aroániá above Kalávrita, 1700—2000 m, 21 ♂, 7 ♀; Mt. Panakhaíkón above Romanou, 1000 m & above Zástova-Psarthí, 1000—1650 m, 4 ♂, 2 ♀; Ipsóús, 800 m, 4 ♂, 2 ♀; 5 km E & 3 km W & 12 km W of Khrisovítsi, 1100—1200 m, 29 ♂, 24 ♀; Mt. Maínalon above Kardharás, 1250—1981 m, 49 ♂, 36 ♀ (all CW); Kápsia, 12.vii.1976, J. P. Duffels, 1 ♂, 2 ♀ (ITZ); Mt. Párnon above Kastánitsa, 1500—1800 m, 5 ♂, 4 ♀ (CW); 13 km E of Langadhá, 1000 m, 15.vii.1976, J. P. Duffels, 8 ♂, 4 ♀ (ITZ).

Diagnosis. — See the descriptions by Harz (1964, 1969).

Variation. — Size and coloration are highly variable. The usually solid black pigmentation of the abdomen may be distinctly less developed, recalling *P. jonicus*. The black lateral bands of the abdomen, however, are invariably

present. Male pronotum and cercus varying, as in figs. 46—49, 153—155. Basal fold of lower ovipositor valve (figs. 225, 226) similar to that of nominate *P. jonicus* and hardly variable.

Distribution. — The range of the species covers the Pelopónnisos, including some offshore islands of Argolís, and extends into Attikí and the Saronic islands.

Localities. — Central Greece: Attikí: — Saronic Is.: Aiyina (Harz, 1964; 1969).

Pelopónnisos: Argolís: Mikínai ("Mykenä") (? Ebner, 1912; Ramme, 1933; Werner, 1937b, 1938; Harz, 1964, 1969); Póros I. (Harz, 1964, 1969); Spét-sai I. (Harz, 1964, 1969); Akhaíá: Mt. Aroániá above Kalávrita, 1700—2000 m; Mt. Panakhaíkón above Romanou & between Zástova and Psarthí, 1000—1650 m; Ilíá: Olimpia (? Ebner, 1912); Arkadhía: Vítina (Werner, 1927; Ramme, 1933); Ipsóús, 800 m; surroundings of Khrisovítsi, 1100—1200 m; Kápsia; Mt. Párnon above Kastánitsa, 1500—1800 m; Lakonia: 13 km E of Langadhá, 1000 m. (Map 2).

Remarks. — Near *P. jonicus*, *P. wernerii*, *P. superbus* (Fischer, 1853) and some other species. Readily distinguished by the pronotum (figs. 153—155), which is more saddle-shaped and more bulbously inflated posteriorly, the lower margin of the lateral lobe being more S-shaped than in any of the allied species. In *P. tessellatus* the elytra are slightly shorter than in *P. jonicus* and the unmodified basal fold of the lower ovipositor valve is quite distinct from *P. jonicus lobulatus*. The male cerci in *P. tessellatus* and *P. jonicus* are much the same: slightly flattened at the inner side of the incurvation instead of perfectly cylindrical as in *P. wernerii*.

Previous records of *P. jonicus* from the Pelopónnisos are here referred to *P. tessellatus*. The occurrence of the former species in this area is not probable since its range does not seem to extend south of Ípiros.

We found the species below the timberline often on *Quercus* (phrygana habitat) and above timberline on various herbaceous plants, often together with *P. nobilis* and *P. zimmeri*.

Poecilimon macedonicus Ramme, 1926
(figs. 50—52, 227, 228, map 3)

Poecilimon macedonicus Ramme, 1926: 280, figs. 3b, 4b (type-locality: Plauš bei Hodowa, Yugoslav Makedonija); 1933: 527, pl. 8 fig. 17. Weidner, 1950: 181. Bei-Bienko, 1954: 299, fig. 173. Harz, 1969: 135, figs. 283, 406—409.

Poecilimon füssi; Berland & Chopard, 1922: 167. Ramme, 1951: 95.

Poecilimon elegans; Uvarov, 1923: 147.

Material studied. — Yugoslavia: Makedonija: Kožuf Planina (Konsko), 800 m, 7.viii.1966, M. Karanman, 1 ♂, 1 ♀; Teovo, 22 km SW of Titov Veles, 26.vii.1965, Ent. Exc. Zoöl. Mus. Amsterdam, 2 ♂; Suvodol, 18 km ENE of Bitola, 700—1000 m, 30.vii.1966, Ent. Exc. Zoöl. Mus. Amsterdam, 2 ♂, 4 ♀; Alinci, near Prilep, 600 m, 1 ♀; 3 km W of Izvor (Babuna R.), 400 m, 1 ♂, 1 ♀; Izvor, 800 m, 1 ♀.

Greece: Makedonía: Mt. Kholomón, 700—1000 m, 18 ♂, 11 ♀; Palaiókastro, 600 m, 5 ♂, 3 ♀; Lakhanás, 200 m, 4 ♂, 9 ♀; Litókhoron, 20 m, 2 ♂; Thessalía: 20 km NW of Elassón, 10 ♂, 10 ♀; Kallithéa, 600 m, 8 ♂, 4 ♀ (all CW); 5 km S of Elassón, 600 m, 5.viii.1975, J. Duffels, 1 ♂ (ITZ).

Diagnosis. — See the descriptions in Ramme (1926—1933), Beî-Bienko (1954) and Harz (1969).

Variation. — The specimens at hand are slightly variable. The male cercus varies as in figs. 50—52. The basal fold of the lower ovipositor valve (figs. 227, 228) is uniform, being thin, lamelliform, well protruding horizontally, it is strongly arched upward anteriorly, with a shell-shaped impression, forming with the gonangulum a deep ovoid pit which, as seen in lateral view, is partly covered by the recurved outer margin of the fold.

Distribution. — The range extends from SW Bulgaria (?) through S Yugoslav Makedonija to the northern and central parts of Greek Makedonía, and southward into the extreme north-eastern part of Thessalía.

Greek localities. — Makedonía: Sérrai: Strimonikó ("Strimonikon") (Weidner, 1951); Khalkidhíki: Mt. Khoomón, 700—1000 m; Palaiókastro, 600 m; Thessaloníki: Lakhanás, 200 m; Thessaloníki ("Saloniki") (Ramme, 1951); 6 km N of Thessaloníki ("Lembet") (Uvarov, 1923; Ramme, 1933; Beî-Bienko, 1954) & "Happy Valley" (Uvarov, 1923); Ák. Még. Karambournoú ("Karaburun") (Uvarov, 1923); Lankadhás ("Langaza plain") (Uvarov, 1923); Kilkís: about 20 km S of Kilkís ("Deve Kran") (Uvarov, 1923); Pélá: Édhessa ("Vodena") (Ramme, 1926); Flórina: Flórina (Berland & Chopard, 1922; Ramme, 1926); Piéria: Litókhoron (Harz, 1969), 20 m.

Thessalía: Lárisa: 20 km N of Elassón; 5 km S of Elassón, 600 m; Kallithéa, 600 m. (Map 3).

Remarks. — A well defined species. Basal fold of lower ovipositor valve recalling *P. brunneri*, but the pit in the latter slightly smaller, more circular and more widely open laterally. Ramme's record (1951) of *P. füssi* from Thessaloníki is far beyond the known range of that species and more probably refers to *P. macedonicus*.

P. macedonicus occurs in the lowlands and was found on diverse low shrubs and herbaeuous plants, in forest clearings as well as open country.

Poecilimon brunneri (Frivaldszky, 1867)

(figs. 53, 54, 229, 230, map 3)

Odontura brunneri Frivaldszky, 1867: 94, pl. 2 figs. 3, 3a—3d (type-localities: Fehértemplon (= Bela Crkva), NE Yugoslavia and Mehadia, SW Romania).

Poecilimon brunneri; Berland & Chopard, 1922: 167; Ramme, 1933: 527, pl. 8 fig. 8, pl. 11 fi. 4. Werner, 1933a: 405; 1934: 324, fig. 3; 1937a: 108; 1938: 167. Beî-Bienko, 1954: 305, fig. 178. Kaltenbach, 1965: 469. Harz, 1969: 134, figs. 282, 401—405.

Poecilimon berlandi Uvarov, 1923: 148, fig. 1 (type-locality: Vakoufkeuy, NE of Florina), Ramme, 1926: 281.

Poecilimon lemnoticus Werner, 1932: 3 (type-locality: Lemnos).

Material studied. — Yugoslavia: Makedonija: Izvor (Babuna R.), 2 km N & 8 km E & 3 km W, 400 m, 5 ♂, 21 ♀, 7 km NE of Titov Veles, 250 m, 2 ♀; P. Pletvar near Prilep, 900 m, 9 ♂, 12 ♀ (all CW); 20 km W. of Skoplje, 30.vi.1975, J. Duffels (ITZ).

Greece: Dhidhimotikón, 40 m, 1 ♀ (CW).

Diagnosis. — See the descriptions in Uvarov (1923, as *P. berlandi*), Ramme (1933), Beî-Bienko (1954) and Harz (1969).

Variation. — The specimens before me cover only a small part of the known range and show but little variation. The male cercus varies as in figs. 53, 54. Basal fold of lower ovipositor valve (figs. 229, 230) much as in *P. macedonicus* but differing consistently in the groove formed between the fold and the gonangulum, which is smaller, round instead of elongate, and more widely open laterally.

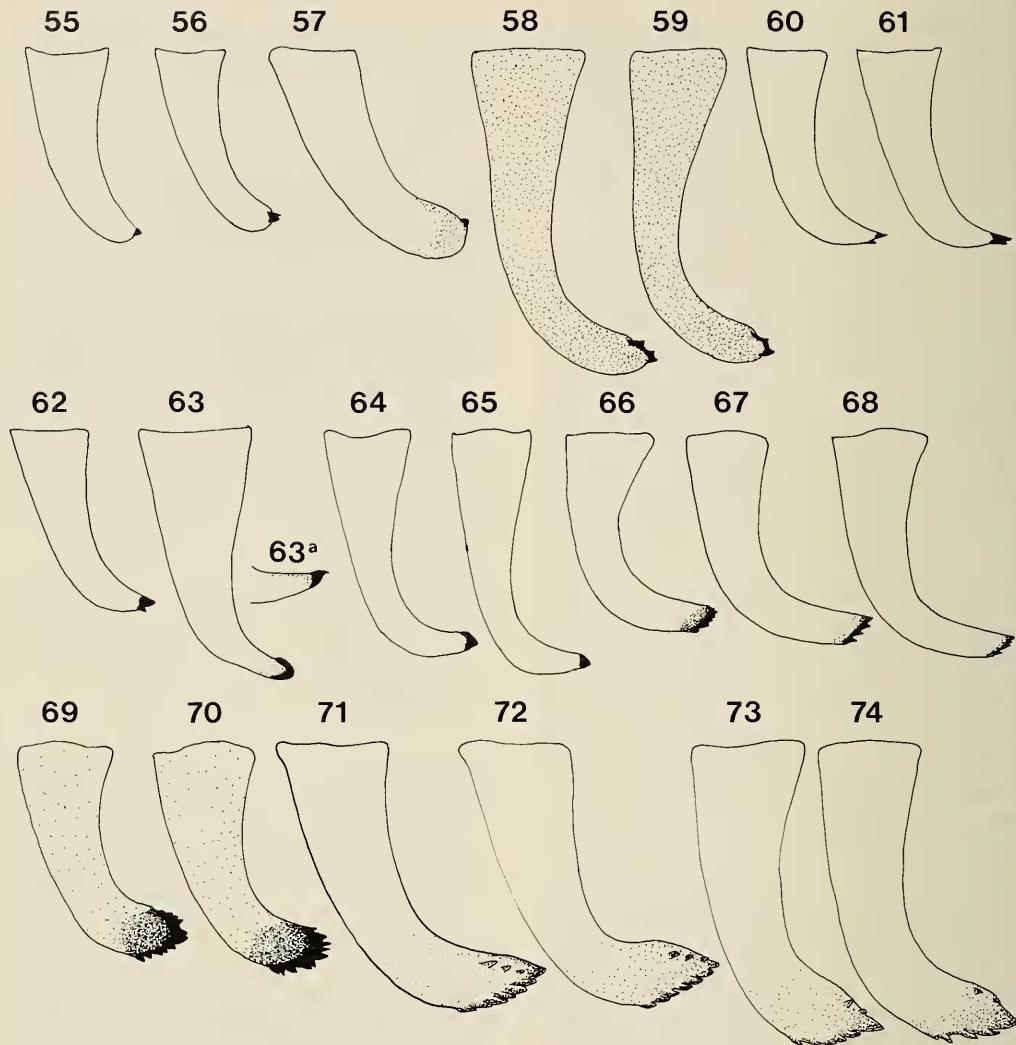
Distribution. — Widely distributed from the southern Ukraina through Romania, Bulgaria and European Turkey to Yugoslavia, Albania and N Greece, including some northern Aegean islands.

Greek localities. — Thráki: Évros: Dhidhimotikón, 40 m; Kaválla: Krinídhes (Kaltenbach, 1965).

Makedonía: Flórina: Vakoufkeuy, NE of Flórina (Berland & Chopard, 1922; Uvarov, 1923; Ramme, 1926).

Thracian Is.: Thásos (Werner, 1938); Samothráki (Werner, 1934).

Eastern Aegean Is.: Límnos ("Lemnos") (Werner, 1932; Ramme, 1933; Werner, 1933a, 1937a). (Map 3.)



Figs. 55—74. *Poecilimon* species, dorsal view of left male cercus. 55—57, *P. cretensis* Werner; 55, 56, Mt. Ídhi; 57, Mt. Lévka; 58, 59, *P. ikariensis* sp. n.; 58, holotype; 59, paratype; 60—62, *P. ebneri* Ramme (Mt. Smólikas); 63, *P. klisuriensis* sp. n. (holotype, 63a tip from behind); 64, 65, *P. zwicki* Ramme; 64, Amórion; 65, Bulgaria; 66—68, *P. orbicularis* Pancic; 66, Bulgaria; 67, 68, Mt. Pangáion; 69, 70, *P. miramae* Ramme (Elasokhórion); 71—74, *P. anatolicus* Ramme; 71, 72, Kesan; 73, 74, Mt. Pangáion.

Poecilimon pergamicus

Brunner von Wattenwyl, 1891

Poecilimon pergamicus Brunner von Wattenwyl, 1891: 29 (type-locality: Pergamon, Asia Minor).
Ramme, 1933: 528, pl. 6 fig. 16, pl. 7 fig. 6, pl. 8 fig. 19, pl. 11 fig. 15. Bei-Bienko, 1954: 312. Harz, 1969: 129, figs. 289, 382—385.

? *Poecilimon pergamicus*; Werner, 1933a: 402.

Diagnosis. — See the descriptions in Ramme

(1933) and Harz (1969).

Distribution. — Known only from the type-locality, Pergamon, western Turkey.

Remarks. — Werner (1933a) recorded three females from the eastern Aegean island of Lésvos ("Mytilene") but was not certain of his identification.

Poecilimon cretensis Werner, 1903

(figs. 55—57, 173, 174, 231, 232, map 3)

Poecilimon jonicus cretensis Werner, 1903: 67, fig. (type-locality: Rethymno, Kreta).*Poecilimon cretensis*; Ramme, 1927: 186; 1933: 538, pl. 9 fig. 33, pl. 11 fig. 27, pl. 12 fig. 24. Harz, 1969: 137, figs. 292, 293, 323, 418, 419. Willemse & Kruseman, 1967: 126.*Poecilimon distinguendus* Kuthy, 1907: 554 (type-localities: Antrum Jovis, Mons Ida & Insula Dhia, Creta).

Material studied. — Kríti: Mt. Ídhi, between Kolíta and Psilorítis, 1700—2100 m, 93 ♂, 43 ♀; Mt. Léfka, Linoséli above Xiloskaló, 1800 m, 2 ♂; Frángo Kástello, 5.v.1973; W. Gravestein, 1 ♂; Phaistós, 23—26. V.1972, M. C. & G. Kruseman, 4 ♂; Knossós, 17—21.v.1972, M. C. & G. Kruseman, 1 ♂ (all CW).

Diagnosis. — See the descriptions in Werner (1903), Ramme (1927, 1933) and Harz (1969). Basal fold of lower ovipositor valve (figs. 231, 232) moderately thick, strongly arched upward anteriorly, protruding downward and forming with the gonangulum a shallow concavity.

Variation. — Variation of the subgenital plate and cercus of male as in figs. 55—57, 173, 174. The coloration varies from completely green to strongly black dorsally.

Distribution. — Known from the islands of Kríti and Náxos.

Localities. — Kíkládhes: Náxos (Ramme, 1927).

Kríti: a full list of localities can be found in Willemse & Kruseman (1976). (Map 3.)

Poecilimon ikariensis sp. n.

(figs. 58, 59, 156, 157, 175, 1976, 193—195, 233, 234, map 3)

Poecilimon hamatus; Werner, 1934: 323, fig. 2c (only Ikáriá).

Material studied. — ♂ holotype, ♀ allotype, 4 ♂, 2 ♀ paratypes, labelled: Hellas, Ikaria, Pass between Aghios Kirykos and Karavostamon, 20.vi.1977, M. C. & G. Kruseman (ITZ).

Diagnosis. — Male (figs. 193, 194). Size small. Integument glossy. Fastigium of vertex narrower than half width of scape, extending anteriorly, not sloping with frons, lateral margins slightly convergent anteriorly towards shallowly grooved apex. Pronotum (figs. 156, 157) short, not saddle-shaped, not widening posteriorly, not or scarcely raised but bulbously inflated posteriorly; fore and hind margins almost straight, lower margin of lateral lobe S-

shaped. Elytra short, extending just beyond hind margin of pronotum apical margin not reaching beyond halfway first tergite. Abdominal tergites without particulars. Cercus (figs. 58, 59) long, extending far beyond hind margin of subgenital plate, slender, apical half cylindrical, apical third strongly incurved, apex obtusely rounded with superimposed small dorsal crest which is somewhat serrate with a single or few small denticles. Subgenital plate (figs. 175, 1976) short, wide, apical part short, hind margin transverse with lateral edges triangularly extending posteriorly. Femora comparatively short and robust, unarmed.

General colour yellowish white, heavily variegated with black. Occiput black. Pronotum black with lower and fore margins and a pair of dorsal spots behind transverse sulcus yellowish white. Elytra black, anterior margins broadly bordered with ivory white. Abdomen with a median and, on either side, a lateral band composed of black spots which do not reach completely hind margin of tergites. Last tergites, supra-anal plate, cerci and hind margin of subgenital plate completely black or almost so. Legs more or less variegated with black and dark brown, hind femur often with series of transverse black stripes.

Female (fig. 195). Integument shiny. Pronotum short, metazona scarcely bulbously inflated posteriorly. Elytra reaching hind margin of pronotum or slightly longer, touching or overlapping each other dorsally. Ovipositor short. Basal fold of lower ovipositor valve (figs. 223, 224) large, strong, well protruding horizontally, slightly arched upward anteriorly, outer margin sinuate dividing the fold into a pair of rounded lobes, the anterior one slightly bent upward and forming with the gonangulum a large concavity.

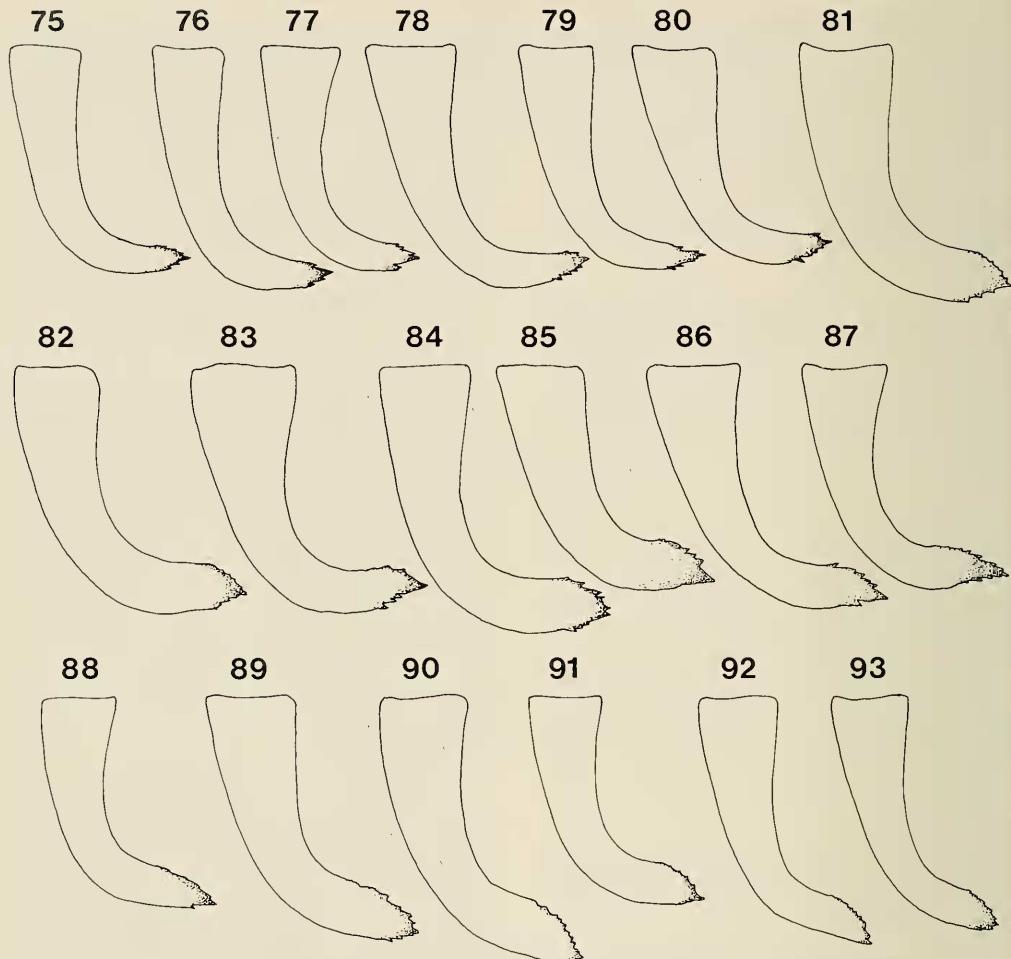
Coloration more uniformly greenish except elytra, which are black, the fore margins broadly bordered with ivory-white.

Measurements: body ♂ 15.0—17.0, ♀ 14.5—16.0; pronotum ♂ 4.5—4.9, ♀ 5.2—5.3; elytron ♂ 1.1—1.3, ♀ 0.8—1.1; hind femur ♂ 12.1—13.0, ♀ 14.5—14.6; ovipositor 7.0—8.0.

Variation. — Shape of pronotum (figs. 156, 157), subgenital plate (figs. 175, 1976) and cercus (figs. 58, 59) of the few males at hand but slightly variable.

Distribution. — Known only from the type-series from the Eastern Aegean island of Ikáriá. (Map 3.)

Remarks. — Readily recognizable by the



Figs. 75—93. *P. chopardi* Ramme, dorsal view of left male cercus. 75, Mt. Kaimakchalan; 76, Kozáni; 77, Neápolis; 78, Mt. Smólikas; 79, Mt. Mavrovouní; 80—82, Khrisomiléa; 83, 84, Mt. Karáva; 85—88, Mt. Timfristós; 89, 90, 15 km W of Karpenísion; 91, Timfristós village; 92, Ipati; 93, Paliokhóri.

shape of the male cercus and the basal fold of the ovipositor. It is the only member of the genus known from Ikaria.

Poecilimon syriacus Brunner von Wattenwyl,
1891
(figs. 235, 336)

Poecilimon syriacus Brunner von Wattenwyl, 1891: 29
(type-localities: Syria (Beirut, Hierosolyma) &
Bitlis in Asia minore). Werner, 1901: 288.
Ramme, 1933: 551, pl. 6 fig. 40, pl. 7 fig. 18, pl. 10
fig. 50, pl. 11 fig. 40. Bei-Bienko, 1954: 314. Harz,
1969: 146, figs. 303, 338, 452—455.

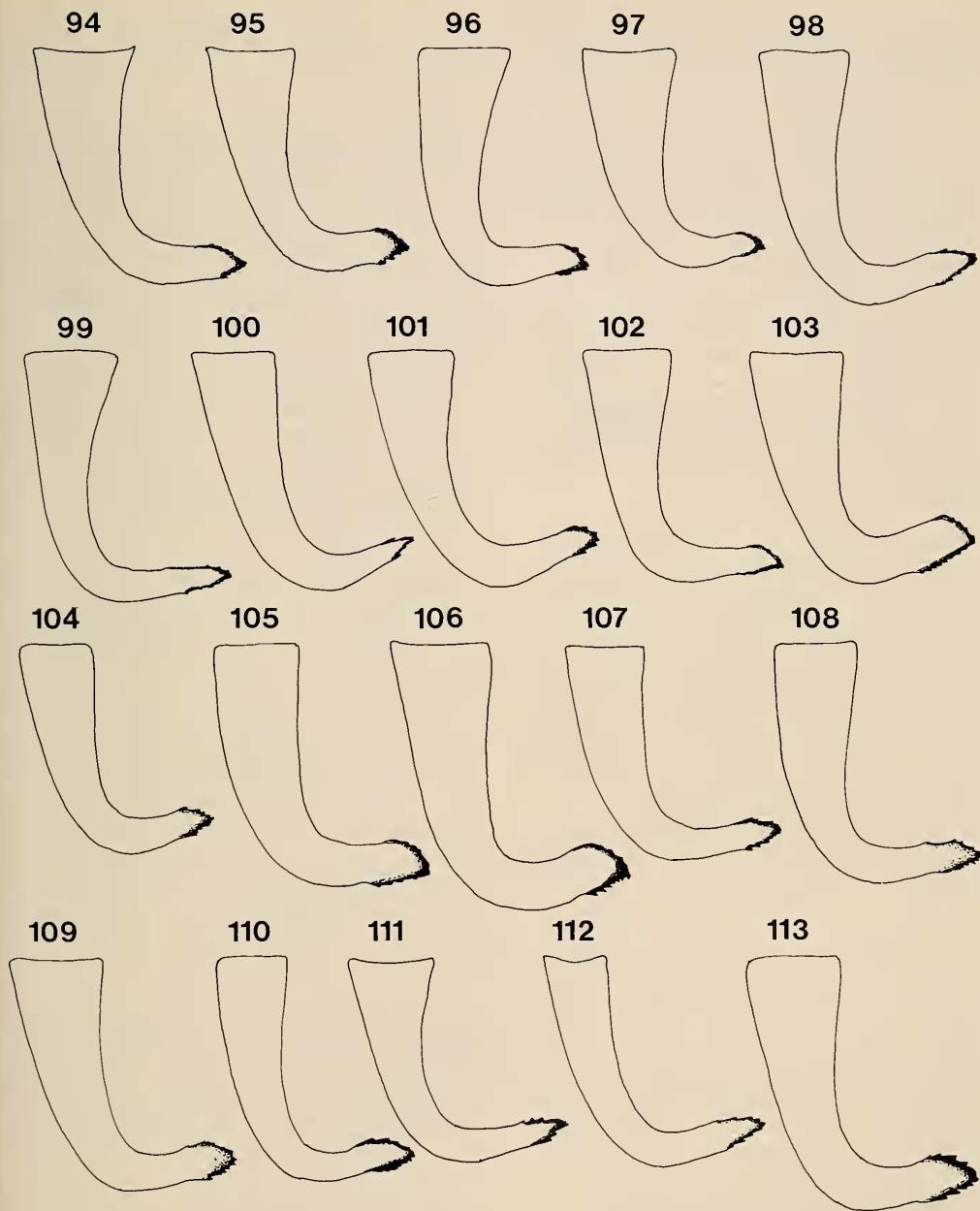
Material studied. — Sámos, between Marathókam-

bos and Ayios Theódhori, 11.vi.1977, M. C. & G. Kruseman, 1 ♀ (ITZ).

Diagnosis. — See the descriptions in Ramme (1933), Bei-Bienko (1954) and Harz (1969).

Distribution. — A wide-ranging species, reaching from Israel and the Lebanon to E and S Turkey. Samos?

Remarks. — Recorded by Werner (1901) from the eastern Aegean island of Sámos, but this record has never been confirmed. The female before me agrees with the description of *P. syriacus*, but its identification remains uncertain.



Figs. 94—113. *P. zimmeri* Ramme, dorsal view of left male cercus. 94, 95, Mt. Tímfí; 96, Mt. Tómaros; 97, Mt. Tzoumérka; 98, 99, Mt. Panaitolikón; 100, 101, Mt. Vardhouísia; 102, 103, Mt. Oiti; 104, Mt. Gióna; 105, 106, Mt. Parnassós; 107, Mt. Aroánia; 108, 109, Mt. Maínalon; 110, 111, Mt. Erimanthos; 112, 113, Mt. Panakhaíkón.

by lack of an associated male. The basal fold of the lower ovipositor valve in the female is illustrated (figs. 235, 236).

Poecilimon ebneri Ramme, 1933
(figs. 60—62, 177, 237, 238, map 3)

Poecilimon ebneri Ramme, 1933: 542, pl. 6 fig. 30, pl. 9 fig. 38, pl. 11 fig. 32 (type-locality: Pashtrik, Albania). Harz, 1969: 141, figs. 298, 432—435. Willemse, 1977: 53.

Poecilimon ebneri peristericus Karaman, 1961: 41, figs. 10—14. **Syn. nov.**

Material studied. — Yugoslavia: Mt. Pelister, western slopes, 31.vii.1965, Ent. Exc. Zoöl. Mus. Amsterdam, 1 ♂ (ITZ).

Greece: Kozáni, Mt. Vérmon, 1850 m, 8.viii.1973, La Greca, 3 ♂, 1 ♀ (IBA); 4 km E of Pisodhéri, Flórina, 1600—1700 m, 3 ♂, 6 ♀; Mt. Bela Voda, 1700—1971 m, 20 ♂, 14 ♀; Mt. Smólikas above Á. Paraskeví, 2000—2300 m, 16 ♂, 3 ♀ (all CW).

Diagnosis. — See the descriptions in Ramme (1933), Karaman (1961) and Harz (1969).

Variation. — Body size rather variable. The male cercus varies as in figs. 60—62. Apical part of male subgenital plate invariably long (fig. 177). Basal fold of lower ovipositor valve small and strongly compressed downward, scarcely forming any concavity with the gonangulum (figs. 237, 238). General colour from green to yellowish. Most specimens are uniformly coloured, some are slightly varicoloured.

Distribution. — Known from Albania (type-locality), Mt. Perister in extreme SW Yugoslav Makedonija, and from some mountains in NW Greece.

Greek localities. — Makedhonía: Kozáni: Mt. Vérmon, 1850 m; Flórina: Mt. Bela Voda, 1700—1971 m; 4 km E of Pisodhéri, 1600—1700 m (Willemse, 1977).

Ípiros: Ioánnina: Mt. Smólikas above Á. Paraskeví, 2000—2300 m (Willemse, 1977). (Map 3.)

Remarks. — The distinctive features of *P. ebneri peristericus* correspond with the variability shown by Greek material of *P. ebneri*. I propose to synonymize both taxa.

The species lives on diverse plants covering stony ground above the timberline. In Greece it may occur together with *P. ornatus*, *P. gracilis*, *P. jonicus jonicus* and *P. chopardi*.

Poecilimon klisuriensis sp. n.

(figs. 63, 63a, 158, 178, 196—198, 239—240, map 3)

Material studied. — ♂ holotype, ♀ allotype, 2 ♀

paratypes, labelled: Hellas, N. Kastorias, Klisoura, 1150 m, 31.vii.1976, F. & L. Willemse & J. Tilmans (CW).

Diagnosis. — Male (figs. 196—197). Size moderate. Integument slightly shiny. Fastigium of vertex about half as wide as greatest width of scape. Pronotum scarcely saddle-shaped, scarcely widening posteriorly, metazona slightly raised, hind margin straight, lower margin of lateral lobe straight anteriorly and widely rounded posteriorly (fig. 158). Elytra well visible, apical margin reaching hind margin of first tergite. Cercus (figs. 63, 63a) robust, base wide, strongly conical, apical fourth obtuse-angularly incurved and slender, inner and outer margins crested toward apex and terminating into a slightly downcurved acute tip. Subgenital plate (fig. 178) slender, apical part quite elongate, hind margin straight, ventral side apically with weak median keel.

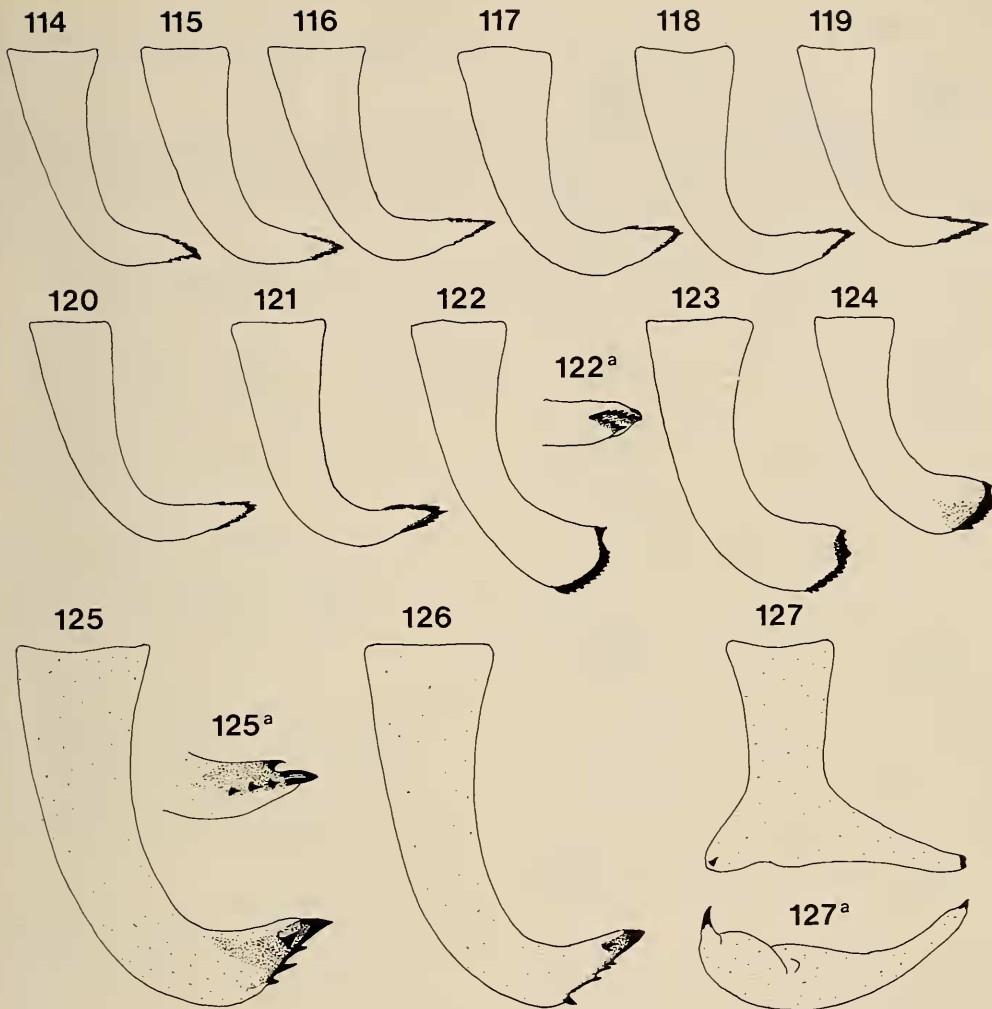
General colour yellowish green, markedly spotted with dark brown. Pronotal metazona with reddish brown median line and, on either side, with a reddish brown streak. Stridulatory area of elytron partly dark brown. Tip of cercus black.

Female (fig. 198). Pronotum cylindrical. Elytra small, lateral, widely separated from each other, completely covered by pronotum. Basal fold of lower ovipositor valve (figs. 239, 240) robust, swollen, posterior part lobe-shaped and extending strongly downward, forming with the gonangulum a narrow small pit, which opens laterally. Base of lower ovipositor valve with lower margin thick and lateral side wrinkled. Coloration as in male.

Measurements: body ♂ 18.0, ♀ 15.2—17.5; pronotum ♂ 5.1, ♀ 5.0—5.5; elytron ♂ 1.5, ♀ 0.0—0.0; hind femur ♂ 12.9, ♀ 15.8—17.2; ovipositor 8.9—9.1

Distribution. — The species is known only from the type-locality in NW Greek Makedhonía at the highest point of a pass between the villages of Korisós and Lékhovo, at the border between the districts of Kastória and Flórina. (Map 3.)

Remarks. — The species comes near *P. ebneri*, from which it differs in the male cercus which is more robust with the tip not bidentate; the male subgenital plate is longer and the lobes of the basal fold of the lower ovipositor valve are also different. It differs from *P. orbelicus* in the same features and the pronotum, which is



Figs. 114—127. *Poecilimon* species, dorsal view of left male cercus. 114—121, *P. thessalicus* Brunner von Wattenwyl; 114, Mt. Pílion; 115, 116, Mt. Óssa; 117, *Leptokariá-Kariá*; 118, 119, Mt. Ólimbos; 120, Ftéri; 121, Mt. Piéria; 122—124, *P. propinquus* Brunner von Wattenwyl; 122, 123, Mt. Dírfis, 122a tip from behind; 124, Akr. Soúnion; 125, 126, *P. sanctipauli* Brunner von Wattenwyl; 125, Ephesus, 125a tip from behind; 126, Líndhos; 127, *P. hamatus* Brunner von Wattenwyl; Líndhos, 127a, tip from behind.

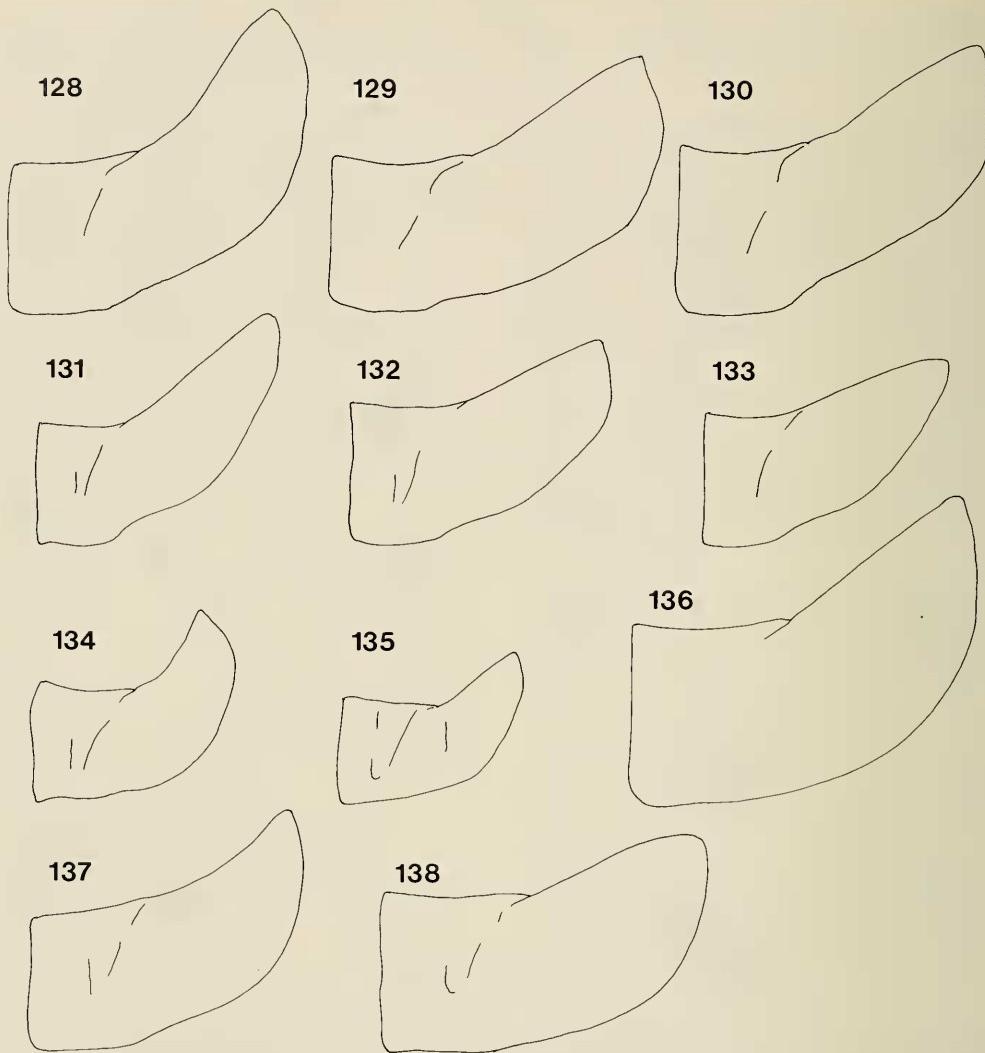
shorter and less raised in the latter. There is also some resemblance with *P. zwicki*. In the latter species, however, the male cercus is more slender and its tip differently shaped, the pronotum is narrower, the male subgenital plate shorter, the female elytra are not placed laterally but overlap and the basal fold of the ovipositor is quite different.

The few specimens were found on the flowers of herbaceous plants along the road.

Poecilimon zwicki Ramme, 1939 (figs. 64, 65, 179, 180, 241, 242, map 3)

Poecilimon zwicki Ramme, 1939: 47, fig. 2 (type-locality: Bansko, Pirin Gebirge, Bulgarien). Kaltenbach, 1965: 469. Harz, 1969: 134, figs. 327, 398—400.

Material studied. — Bulgaria: Goce Delčev, 3.vii.1961, J. Mařan, 1 ♂, 1 ♀. Greece: Amórión, 40 m, 1 ♂; Stavroúpolis, 100 m,



Figs. 128—138. *Poecilimon* species, lateral view of male pronotum. 128—130, *P. hoelzeli* Harz; 128, Mt. Piéria; 129, Mt. Olimbos; 130, Khrisomíla; 131—133, *P. pindos* sp. n.; 131, 132, Mt. Timfi; 133, Mt. Mavrovoúni; 134, 135, *P. gracilis* (Fieber), Mt. Bela Voda; 136—138, *P. obesus* Brunner von Wattenwyl; 136, Kalávrita; 137, Kápsia; 138, Khrisovítisi.

1 ♀; Mt. Falakrón above Vólax, 1250 m, 1 ♂; Mt. Vrondóous, 800 m, 9 ♂, 7 ♀ (all CW).

Diagnosis. — See the descriptions in Ramme (1939) and Harz (1969).

Variation. — Male subgenital plate and cercus variable as shown in figs. 64, 65, 179, 180. Basal fold of lower ovipositor valve thin, lamelliform, small, moderately protruding horizontally, scarcely arched upward anteriorly, scarcely im-

pressed from above, forming with the gonangulum an elongate weak impression (figs. 241, 242).

Distribution. — The known range covers S Bulgaria, E Greek Makedhonía and Greek Thráki.

Greek localities. — Thráki: Évros: Amórion, 40 m; Xánthi: Stavróúpolis, 100 m.

Makedhonía: Kaválla: Kalamíka; Bátis; Krinídhes;

Dhiastávrosis; Avramilia; Dráma: Dráma (all Kaltenbach, 1965); Mt. Falakrón, 1250 m; Sérrai: Mt. Vrondóús, 800 m. (Map 3.).

Remarks. — The Greek specimens were found on ferns and diverse herbaceous plants of woodland and open land. In Greece the species may occur together with *P. orbelicus* and *P. thoracicus*.

Poecilimon orbelicus Pančić, 1883
(figs. 66—68, 243, 244, map 3)

Poecilimon orbelicus Pančić, 1883: 163 (type-locality: Mt. Rilo, Bulgaria). Ramme, 1933: 547, pl. 6 fig. 36, pl. 7 fig. 16, pl. 9 fig. 45, pl. 11 fig. 37, pl. 12 fig. 28. Bei-Bienko, 1954: 325, fig. 188. Harz, 1969: 146, figs. 317, 335, 456—458.

Poecilimon bulgaricus Brunner von Wattenwyl, 1891: 30 (type-locality: Mt. Rilo, Bulgaria).

Material studied. — Bulgaria: Pirin Mts., (in Russian), 1850 m, 22.viii.1958, B. Bienko, 1 ♂, 1 ♀.

Greece: Mt. Vrondóús, 1400 m, 7 ♂, 3 ♀; Mt. Falakrón above Vólx, 1250—1900 m, 12 ♂, 7 ♀; Mt. Pangáion above Akrovoúni, 1250—1900 m, 22 ♂, 28 ♀ (all CW).

Diagnosis. — See the descriptions in Ramme (1933), Bei-Bienko (1954) and Harz (1969).

Variation. — Male cercus as shown in text-figs. 66—68.

Distribution. — Known from SW Bulgaria and adjacent parts of Greek Makedhonía.

Greek localities. — Makedhonía: Thessaloníki ("Saloniki") (Bei-Bienko, 1954); Sérrai: Mt. Vrondóús, 1400 m; Dráma: Mt. Falakrón, 1250—1900 m; Kaválla: Mt. Pangáion, 1250—1900 m. (Map 3.).

Remarks. — The basal fold of the lower ovipositor valve (figs. 243, 244) resembles that of *P. ebneri* but is more compressed downward posteriorly, and the concavity between the fold and the gonangulum is deeper. Bei-Bienko's record (1954) is based on a single male labelled "Saloniki". He supposed that the precise locality is further north. The species may occur in Greece together with *P. pancici*, *P. anatolicus* and *P. zwicki*. We found it on the higher parts of the mountains up to above the timberline.

Poecilimon miramae Ramme, 1933
(figs. 69, 70, 181, map 3)

Poecilimon miramae Ramme, 1933: 563, pl. 6 fig. 46, pl. 10 fig. 58. (type-locality: Kilia, European Turkey). Bei-Bienko, 1954: 339. Harz, 1969: 159, figs. 305, 336, 510—513.

Material studied. — Greece: Évros, Elasokhórion, 180 m, 3 ♂ (CW).

Diagnosis. — See the descriptions in Ramme (1933), Bei-Bienko (1954) and Harz (1969).

Variation. — Insufficiently known by lack of material. Male subgenital plate and cercus as in text-figs. 69, 70, 181.

Distribution. — The range covers NW Turkey, SE Bulgaria and E Greek Thráki. The occurrence in Greece was not yet known.

Greek locality. — Thráki: Évros: Elasokhórion, 180 m. (Map 3.)

Remarks. — The Greek specimens were found sparsely on *Rubus*, at the riverside of the Erithropós.

Poecilimon anatolicus Ramme, 1933
(figs. 71—74, 245, 246, map 4)

Barbitistes flavescens; Fieber, 1853: 175.
Poecilimon flavescens; Brunner von Wattenwyl, 1878: 42; 1882: 266.

Poecilimon anatolicus Ramme, 1933: 555, pl. 6 fig. 42, pl. 7 fig. 20, pl. 10 fig. 53, pl. 11 fig. 43, pl. 12 fig. 33 (type-locality: Bursa, Anatolia). Bei-Bienko, 1954: 333.

Eupoecilimon anatolicus; Ramme, 1951: 336, figs. 93a—c, 94.

Material studied. — Turkey: Kesan, 60 m, 15.vii.1979, L. Willemse, 11 ♂, 10 ♀; Greece: Mt. Pangáion above Akrovoúni, 1250 m, 16 ♂, 6 ♀ (all CW).

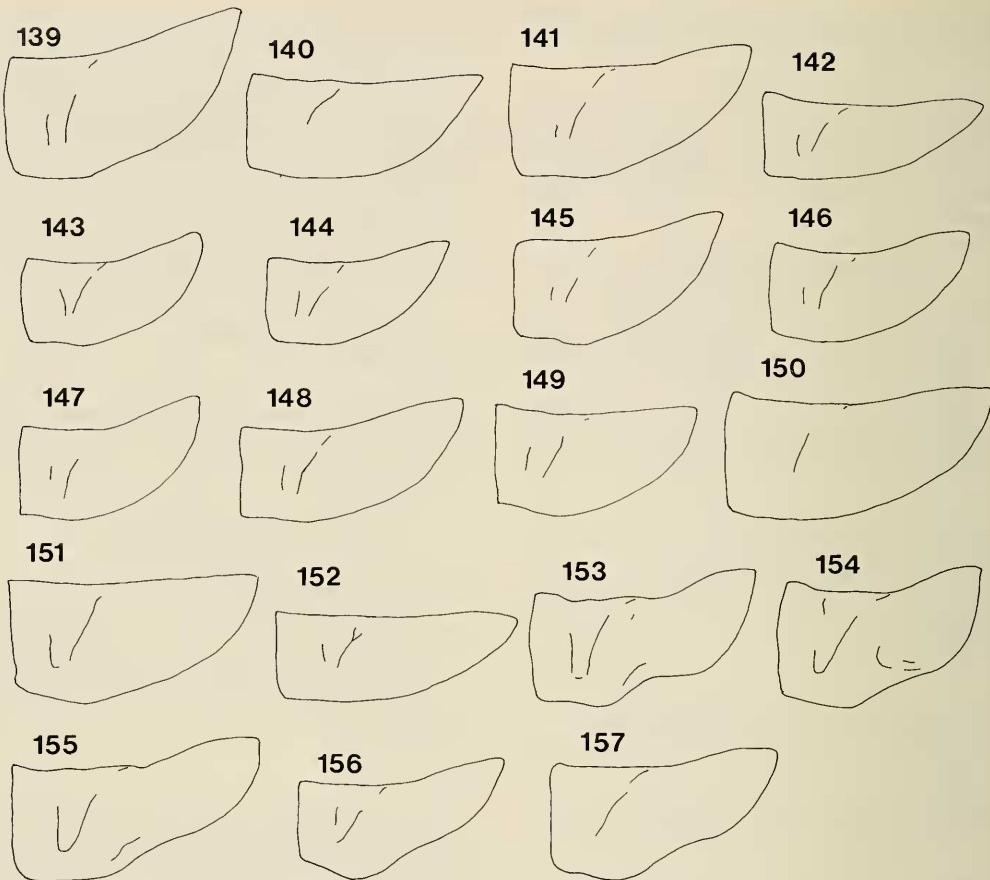
Diagnosis. — See the descriptions in Ramme (1933, 1951) and Bei-Bienko (1954). Basal fold of lower ovipositor valve (figs. 245, 246) strong, swollen, its posterior part lobe-shaped and well protruding horizontally, its anterior part strongly compressed downward and arched upward, longitudinally impressed above, forming an elongate, dark brown concavity with the gonangulum, which is directed anteriorly.

Variation. — The male cercus is known to be rather variable (figs. 71—74).

Distribution. — Hitherto known only from the Bursa area of extreme NW Anatolia. Its occurrence in the European part of Turkey and E Greek Makedhonía was unknown and extends the range considerably westward.

Greek locality. — Makedhonía: Kaválla: Mt. Pangáion, 1250 m. (Map 4.).

Remarks. — Both sexes are characterized by



Figs. 139—157. *Poecilimon* species, lateral view of male pronotum. 139—144, *P. jonicus jonicus* (Fieber); 139, Petália; 140, 141, Perithía; 142, 143, Arísti-Pápingon; 144, Trepca-Otsesevo; 145—150, *P. jonicus lobulatus* ssp. n.; 145, 146, Métovon; 147, 148, Khrisomiléa; 149, Kaléntzion; 150, Nikópolis; 151, 152, *P. wernerii* Ramme (Lekhaína); 153—155, *P. tessellatus* (Fischer); 153, Attiki; 154, Mt. Maínalon; 155, Mt. Panakhaïkon; 156, 157, *P. ikariensis* sp. n.; 156, holotype; 157, paratype.

colour, shape of male cercus and of basal fold of the lower ovipositor valve. The shape of the latter is similar to that of *P. chopardi* and *P. thessalicaeus*.

Hitherto unknown from Europe. The Greek specimens were found in a forest clearing on ferns and other herbaceous plants, together with *P. orbelicus* and *P. pancici*.

Poecilimon chopardi Ramme, 1933

(figs. 75—93, 159—162, 247—252, map 4)

Poecilimon flavescens; Berland & Chopard, 1922: 167.

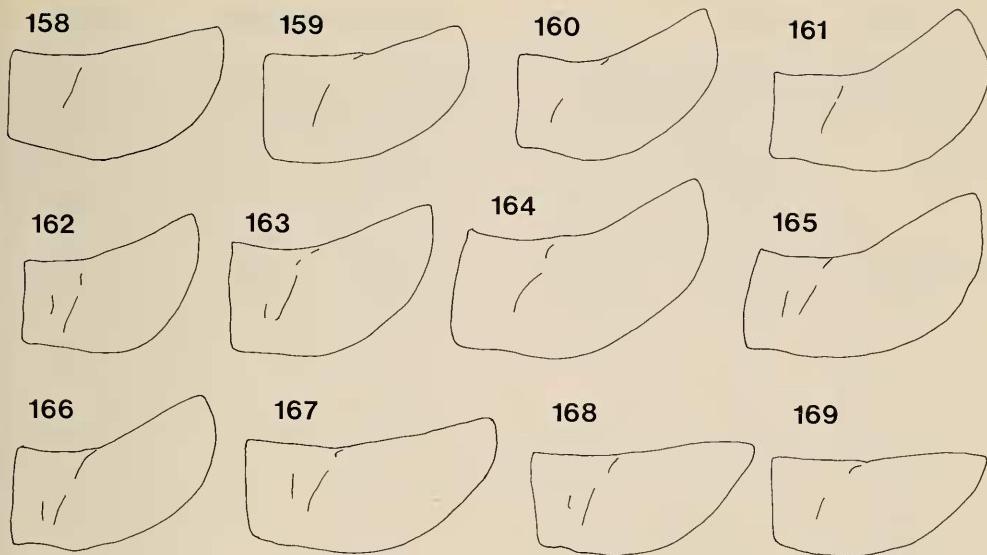
Poecilimon chopardi Ramme, 1933: 548, pl. 6 fig. 38, pl. 9 fig. 47 (type-locality: S. de Monastir ("Bitola") entre Bukova et Holéven). Bei-Bienko, 1954:

329. Karaman, 1962: 1 pag. (♀). Harz, 1969: 145, figs. 450—451.

Poecilimon veluchiianus Ramme, 1933: 549, pl. 6 fig. 39, pl. 10 fig. 48, pl. 11 fig. 38, pl. 12 fig. 30 (type-locality: Veluchi gebirge, 1800—2000 m). Werner, 1933b: 190 (as *veluchiensis*). Harz, 1969: 150, figs. 318, 468—473. *Syn. nov.*

Material studied. — Yugoslavia: Makedonija, Kajmakcelan, Redir, 18.vii.1967, M. Karaman, 1 ♂, 1 ♀.

Greece: 2 km E of Álona, 1000 m, 2 ♀; 12 km W of Flórina, 1000 m, 1 ♂; 6 km SW of Dhrosopiyí, 1200 m, 13 ♂, 4 ♀; Polipótamon, 1100 m, 2 ♂, 1 ♀ (all CW); 18 km SE of Kozáni, 3.vii.1975, J. P. Duffels, 2 ♂, 8 ♀ (ITZ); Vervendos, 250 m, 1 ♀; Dhrépano, 700 m, 2 ♀; Neápolis, 800 m, 1 ♀; Eptakhóri, 1190 m, 1



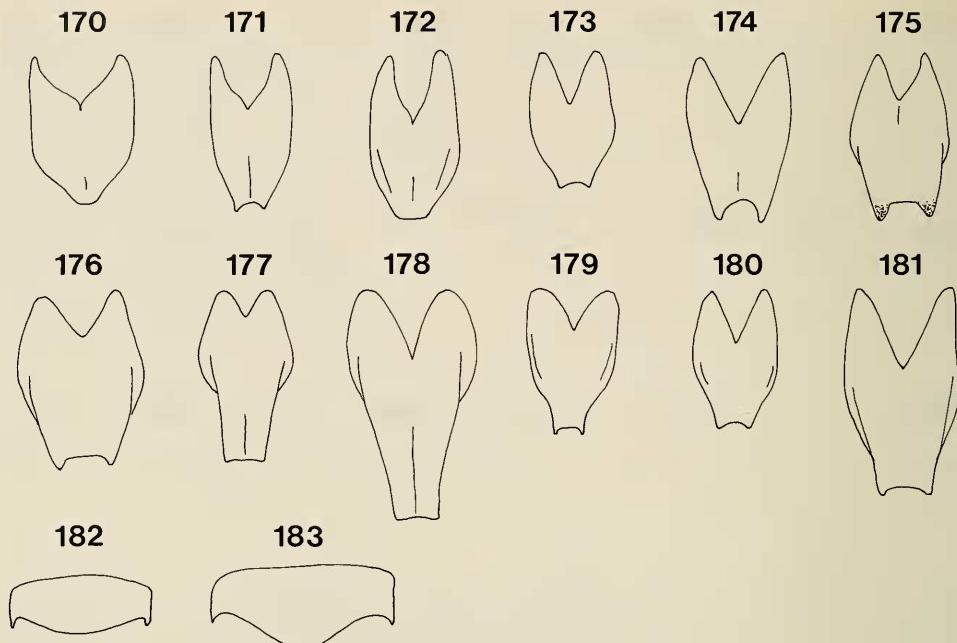
Figs. 158—169. *Poecilimon* species, lateral view of male pronotum. 158, *P. klisuriensis* sp. n. (holotype); 159—162, *P. chopardi* Ramme; 159—160, Paraskevi; 161, 162, Mt. Timfristós; 163—166, *P. zimmeri* Ramme; 163, 164, Mt. Parnassós; 165, 166, Mt. Maínalon; 167—169, *P. thessalicus* Brunner von Wattenwyl; 167, Mt. Óssa; 168, Mt. Pilión; 169, Mt. Ólimbos.

♂, 1 ♀; Grevená, 10 km SW of Dheskáti, 700 m, 19 ♂, 18 ♀; Paraskevi near Dheskáti, 600 m, 33 ♂, 27 ♀; Kraniá Dheskátis, 600 m, 1 ♂; Trigón (Trikkala), 800 m, 1 ♂; Kalabáka, Météora, 14.vi.1979, J. Smid & F. Smid-Elbers, 1 ♂; Khrismiléa, 900—1200 m, 38 ♂, 11 ♀ (all CW); Pertoúli, 4.viii.1973, La Greca, 2 ♂, 1 ♀; Mt. Karáva, 2000 m, 5.viii.1973, La Greca, 6 ♂, 5 ♀ (both IBA); Mt. Smólikas above Á. Paraskevi, 800—2000 m, 47 ♂, 13 ♀; Métsovon, 3 km N & 3 km E & 5—10 km N, 1300—1600 m, 40 ♂, 2 ♀ (both CW); Métsovon, 1500 m, 1.viii.1973, La Greca, 1 ♂, 1 ♀ (IBA); Mt. Mavroúni near Métsovon, 1800—2100 m, 24 ♂, 10 ♀; Mt. Timfristós above Karpenísion, 1700—2100 m, 94 ♂, 80 ♀ (topotypes of *P. veluchianus*) (both CW); 15 km W of Karpenísion, 1100 m, 8.vii.1975, J. Duffels, 26 ♂, 26 ♀ (ITZ); village of Timfristós, 1100 m, 4 ♂, 1 ♀ (CW); Ípati-Neokhórión, 800 m, 7.vii.1975, J. Duffels, 1 ♂ (ITZ); Palaiokhóri, 400 m, 3 ♂, 4 ♀ (CW).

Diagnosis. — Male. Size moderate. Integument uniformly dull. Width of fastigium of vertex from slightly less to distinctly more than half the greatest width of scape. Pronotum (figs. 159—162) slightly saddle-shaped, a little widening posteriorly, metazona more or less raised and scarcely inflated, hind margin straight or weakly incised, lower margin of lateral lobe straight or almost so anteriorly and widely convex posteriorly. Elytra well visible, apical mar-

gin reaching from almost hind margin of first to beyond middle of second tergite. Cercus (figs. 75—93) from slender to robust, on proximal half slightly conical, in distal half about cylindrical and gradually incurved; apex not widened, slightly compressed dorso-ventrally, sometimes even flattened above, terminating into an apical tooth which stands between mid-dorsal and the side, inner and outer margins more or less serrate or provided with two to six small teeth over a variable distance. Subgenital plate short, lateral margins straight or sinuate, converging posteriorly, hind margin narrow, straight or slightly concave or with V-shaped emargination, postero-lateral edges whether or not produced.

General colour yellowish green, straw-yellow or brown, usually distinctly spotted with dark brown. Antennae finely annulated. Pronotal dorsum on either side with a yellowish or creamy-white streak which, in the metazona, is bordered medially with rusty or reddish brown. Elytra yellowish brown, with or without a pre-apical dark spot, stridulatory area sometimes dark brown. Abdomen of general colour; dorsum often paler brown or yellowish and sometimes provided with a median dark brown or blackish band, and on either side with an ill-



Figs. 170—181. *Poecilimon* species, ventral view of male subgenital plate. 170—172, *P. jonicus jonicus* (Fieber); 170, Dhassia; 171, 172, Gazáтика; 173, 174, *P. cretensis* Werner (Mt. Ídhi); 175, 176, *P. ikariensis* sp. n. (paratypes); 177, *P. ebneri* Ramme (Mt. Smólikas); 178, *P. klisuriensis* sp. n. (holotype); 179, 180, *P. zwicki* Ramme; 179, Amórion; 180, Bulgaria; 181, *P. miranae* Ramme (Elasokhórión). Figs. 182, 183. *Poecilimon nobilis* Brunner von Wattenwyl, hind margin of last abdominal tergite of male; 182, Mt. Máinalon; 183, Mt. Taíyctos.

defined lateral band of similar colour; median band composed of a pair of spots along fore margin of tergites, extending and narrowing posteriorly, usually without reaching hind margin of tergites and separated at middle by a yellowish line. Cercus with tip more or less black.

Female. — Pronotum cylindrical, metazona sometimes scarcely widened and raised posteriorly. Elytra completely covered by pronotum, placed laterad and widely separated from each other. Basal fold of lower ovipositor valve (figs. 247—252) swollen, strong, protruding downward, arched upward anteriorly, longitudinally impressed and forming with gonangulum an elongate concavity directed antero-ventrally. Coloration as in male, though usually more uniform.

Measurements: body ♂ (14.6—20.5, ♀ 16.0—18.8; pronotum ♂ 3.8—5.2, ♀ 4.3—6.8, elytron ♂ 1.8—3.4, ♀ 0.0—0.0; hind femur ♂ 13.1—16.4, ♀ 13.8—18.4; ovipositor 7.2—9.9.

Variation. — The species is highly variable.

The male cercus shows some geographical variation. Throughout the northern part of the range (figs. 75—79) the apical tooth of the cercus is almost invariably located in the middle of the width of the apex, and both the length of the inner and outer apical margins and their number of teeth are about equal to each other. Throughout the southern part of the range (figs. 80—93), however, the apical tooth of the cercus is situated more laterally and at the same time the length and the number of teeth of the inner apical margin are increased while those of the outer margin are decreased. The basal fold of the lower ovipositor valve is but slightly variable (figs. 247—252).

Distribution. — The range extends from the extreme SW part of Yugoslav Makedonija through W Greek Makedonía and N Thessália to the Píndhos range, covering the eastern and central mountains from the Albanian border as far south as Karpeníson, and reaching eastward the lowlands and hills at the northern sides of

Mt. Oíti and Mt. Parnassós in central Greece.

Greek localities. — Makedhonía: Kozáni: 18 km SE of Kozáni; Vevendos; Dhrépano, 700 m; Néápolis, 800 m; Flórina: Flórina (Berland & Chopard, 1922); 2 km E of Álona, 1000 m; 12 km W of Flórina, 1000 m; 6 km SW of Dhrosopiyí, 1200 m; Polipótamon, 1100 m; Kastoria: Eptakhóri, 1190 m; Grevéná: 10 km SW of Dheskátí, 700 m; Paraskeví near Dheskátí, 600 m.

Thessália: Lárissa: Kraniá Dheskátí, 600 m; Trikkala: Kalabáká; Trigón, 800 m; Khrisomiléa, 900—1200 m; Pertoúli; Mt. Karáva, 2000 m.

Ípiros: Ioánnina: Mt. Smólikas above Á. Paraskeví, 800—2000 m; Métsovon, 1500 m; 3 km N & 3 km E & 5—10 km N of Métsovon, 1300—1600 m; Mt. Mavrovouní near Métsovon, 1800—2100 m.

Central Greece: Evritanía: Mt. Timfristós ("Veluchi") (Ramme, 1933; Werner, 1933b), above Karpeníson, 1700—2100 m; 15 km W of Karpeníson, 1100 m; Fthiotís: Timfristós village, 1100 m; between Ípati and Neokhórion, 800 m; Fokís: Palaiokhóri, 400 m. (Map 4.)

Remarks. — During examination of the many specimens listed above it became apparent that characters of *P. chopardi* and *P. veluchianus* usually considered distinctive are completely bridged by variation. Therefore, these taxa should be considered conspecific. Both were described simultaneously in the same work (Ramme, 1933). The description of *P. chopardi* is preceding (pag. 548) that of *P. veluchianus* (pag. 549). As none of these names have any special significance, I select *P. chopardi* and propose to synonymize *P. veluchianus* with it.

Though highly variable, the species is well defined by the dull integument, the gradual and never angulate incurvation of the male cercus, and the small elytra and shape of the basal fold of the female ovipositor. The species resembles much *P. zimmeri* and *P. thessalicus*. The distinction from the former is discussed below. *P. thessalicus* differs from *P. chopardi* in the broader pronotum which is less saddle-shaped and more widened behind, and also in the integument, which is conspicuously glossy instead of dull.

Hitherto the species was known only from scanty material from Yugoslav Makedonija (Berland & Chopard, 1922; Ramme, 1933; Karaman, 1962), a male from Flórina (Berland & Chopard, 1922), and some material from Mt. Timfristós (Ramme, 1933; Werner, 1933b).

The species was found on diverse herbaceous plants, from the lowlands up to above the timberline. In Greece it may occur together with *P. ornatus*, *P. hoelzeli*, *P. pindos*, *P. gracilis*,

P. jonicus jonicus, *P. jonicus lobulatus* and *P. ebneri*.

Poecilimon zimmeri Ramme, 1933

(figs. 94—113, 163—166, 253—258, map 4)

Poecilimon propinquus; Brunner von Wattenwyl, 1878: 44 (only Parnass).

Poecilimon thessalicus; Brunner von Wattenwyl, 1891: 30 (partim, only Parnassus).

Poecilimon zimmeri Ramme, 1933: 547, pl. 6 fig. 37, pl. 9 fig. 46, pl. 12 fig. 29 (type-locality: Parnass, M.-Griechenland). Bei-Bienko, 1954: 326, fig. 189. Harz, 1969: 147, figs. 311, 459—463.

Material studied. — Greece: Mt. Tímfi above Pápingon, 1800—2100 m, 64 ♂, 37 ♀; Mt. Tómáros above Varyiádhes, 1200—1600 m, 2 ♂, 3 ♀; Mt. Tzoumérka above Katarráktis, 1700—2100 m, 7 ♂; Mt. Panaitolikón above Prousós, Xerovoúni, 1400—1650 m, 11 ♂, 14 ♀; Mt. Oíti above Ípati, near refuge & Korífin & 10 km NW of Pavliání, 1750—2135 m, 98 ♂, 68 ♀; Mt. Vardhóúsiá above Mousounítsa, 1600—2000 m, 41 ♂, 29 ♀; Lilaía, 29.v.1976, A. Malicky, 1 ♂ (all CW); Mt. Gióna, 1900 m, 13.viii.1973, La Greca, 2 ♂, 3 ♀; Mt. Parnassós, 12.viii.1973, 1800—2100 m, La Greca, 9 ♂, 5 ♀ (both IBA), above Arákhova & plateau N of Arákhova & below summit, 1200—1900 m, 35 ♂, 65 ♀ (topotypes); Mt. Pannakhaíkón above Zástova, 1000—1800 m, 28 ♂, 29 ♀; Mt. Aroánia above Kalávrita, 1700—2000 m, 5 ♂, 3 ♀; Mt. Erimanthos above Kaléntzi, 1700—2000 m, 8 ♂, 9 ♀; Mt. Mainalon above Kardhára, 1550—1981 m, 52 ♂, 43 ♀ (all CW).

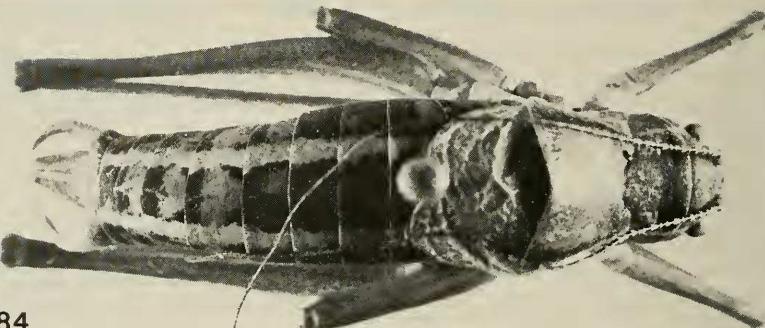
Diagnosis. — Differs from *P. chopardi* as follows.

Male. — Cercus with apical incurvation stronger, more abrupt, almost rectangular. (Apex ranging from similar to *P. chopardi* to often slightly widened (figs. 94—113).) Colour pattern of abdomen often more distinct.

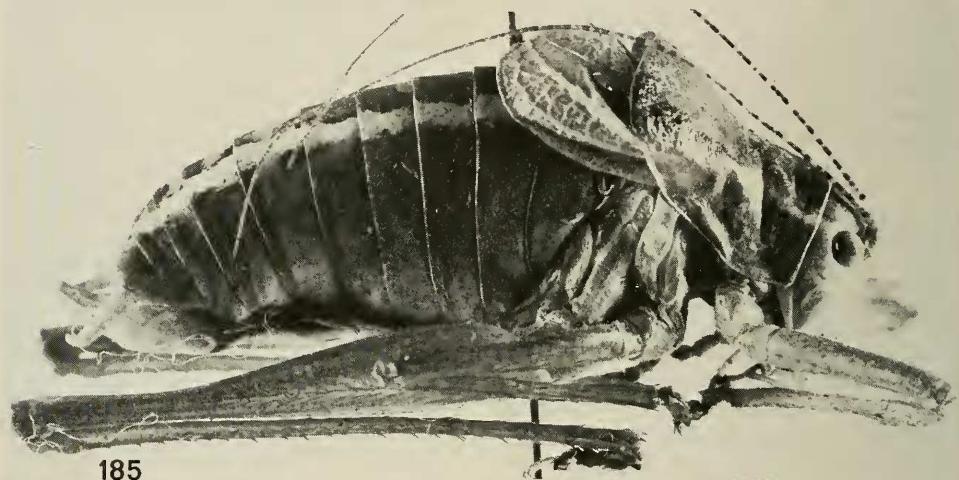
Female. — Basal fold of lower ovipositor valve (figs. 253—258) strong, well protruding horizontally, often lobe-shaped and not strongly bent downward anteriorly, shallowly and roundly impressed above and with gonangulum forming a pit with a lateral opening.

Variation. — Throughout its range the incurvation of the male cercus is invariably strong and angulate. The length and width of the apical part and the armature of the tip, however, are quite variable (figs. 94—113). Also the variation of the male pronotum (figs. 163—166) and the basal fold of the ovipositor (figs. 253—258) is noteworthy.

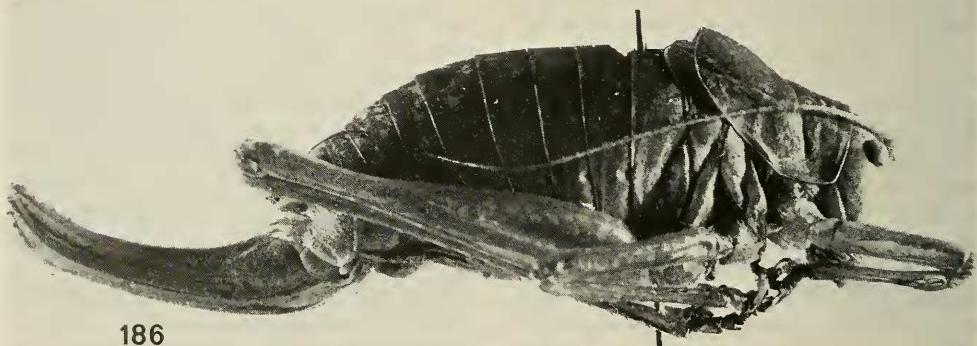
Distribution. — The species has a remarkable distribution: from Mt. Tímfi, the northwestern part of the Píndhos range, southward along the



184



185



186

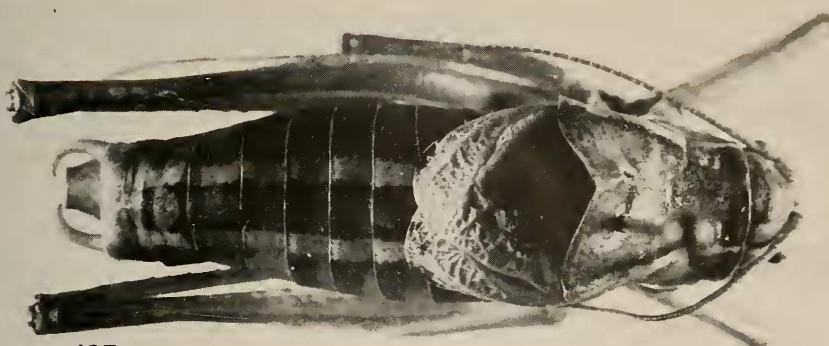
Figs. 184—186. *Poecilimon hoelzeli* Harz; 184, 185, ♂, Mt. Ólimbos, Refuge B; 186, ♀, idem.

western mountains of this range, through the mountains of central Greece, south of Karpeníssion, it reaches eastward Mt. Parnassós and southward covers the Pelopónnisos.

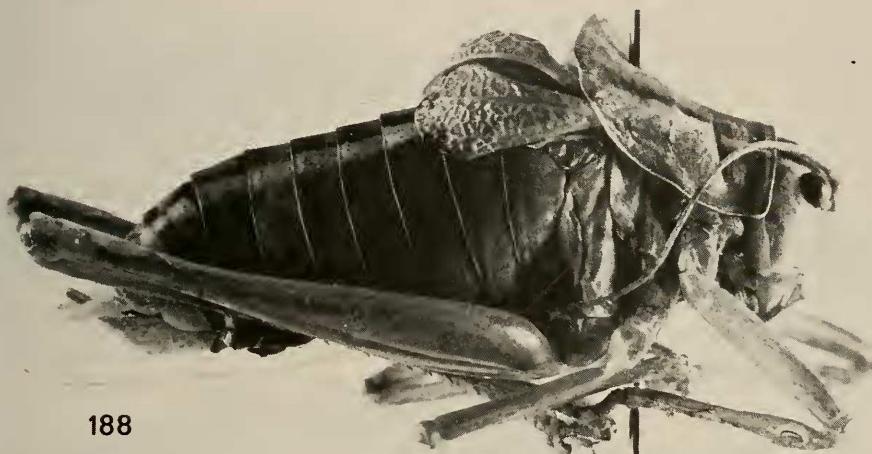
Localities. — Ípiros: Ioánnina: Mt. Timfi above Pá-

pingon, 1800—2100 m; Mt. Tómaros above Váriádhés, 1200—1600 m; Árta: Mt. Tzoumérka above Katarrákts, 1700—2100 m.

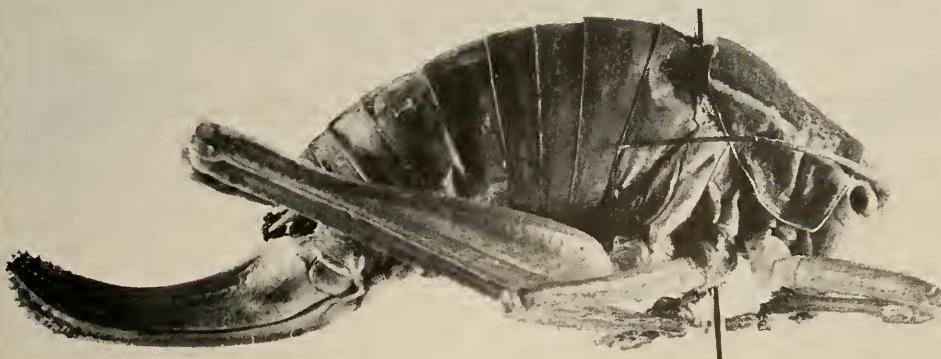
Central Greece: Evritánia: Mt. Panaitolikón above Próúbos, 1400—1650 m; Fókis: Mt. Oíti, 1750—2135 m; Mt. Vardhousia above Mousounítsa, 1600—2000



187

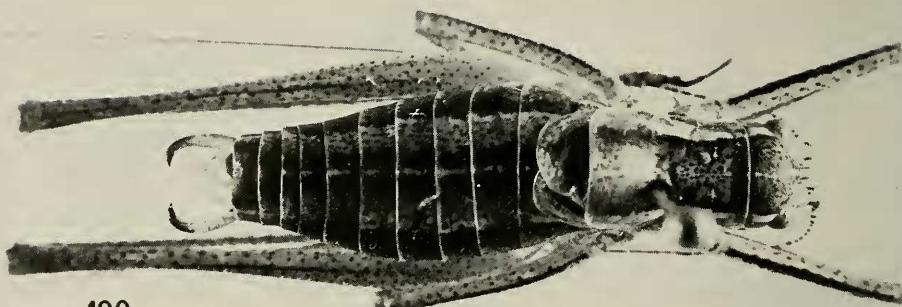


188

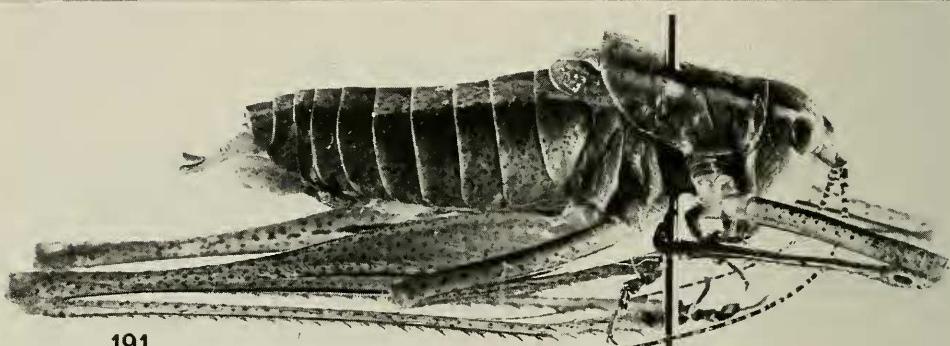


189

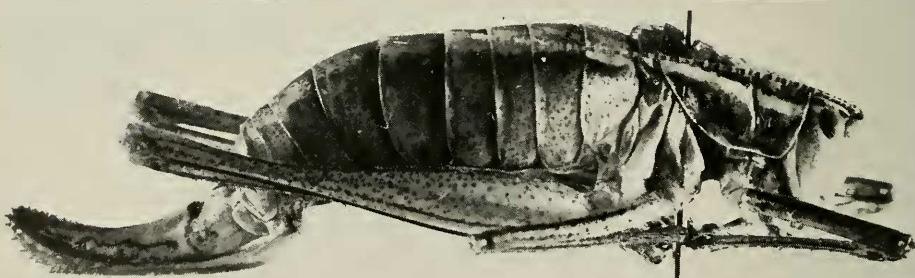
Figs. 187—189. *Poecilimon pindos* sp. n.; 187, 188, ♂ paratype, Mt. Timfi; 189, ♀ allotype.



190



191



192

Figs. 190—192. *Poecilimon jonicus lobulatus* ssp. n.; 190, 191, ♂ paratype, Khrisomiléa; 192, ♀, Metsovon.

m; Mt. Gióna; Lilaía; Voiotía: Mt. Parnassós ("Parnassus", Brunner von Wattenwyl, 1891) ("Parnass", Brunner von Wattenwyl, 1878; Ramme, 1933; Harz, 1969), 1200—2100 m.

Pelopónnisos: Akhaía: Mt. Panakhaíkón above Zástova, 1000—1800 m; Mt. Aroánia above Kalávrita, 1700—2000 m; Mt. Erímanthos above Kaléntzi, 1700—2000 m; Arkadhía: Mt. Mainalon above Kardhára, 1550—1981 m. (Map 4.)

Remarks. — *P. zimmeri* and *P. chopardi* probably represent vicariant species. Transitional forms have not been found.

Hitherto known only from the type-locality. The record from Istanbul, Turkey (Ramme, 1933; Harz, 1969) is quite improbable.

The habitat is similar to that of *P. chopardi*, and it was found together with *P. pindos*, *P. nobilis*, *P. jonicus lobulatus* and *P. tessellatus*.

Poecilimon thessalicus Brunner von Wattenwyl, 1891

(figs. 114—121, 167—169, 259—262, map 4)

Poecilimon thessalicus Brunner von Wattenwyl, 1891: 30 (partim, not Parnassus) (type-locality: Montes

Ossa in Thessalia). Ramme, 1933: 550, pl. 7 fig. 17, pl. 10 fig. 49, pl. 11 fig. 39. Werner, 1933a: 402; 1938: 166. Harz, 1964: 450, figs. 20—21; 1969: 150, figs. 474—478. Willemse, 1974: 352; 1977: 53.

Poecilimon nitidus Werner, 1932: 2 (type-locality: Skopelos, N. Sporaden). Harz, 1964: 449, figs. 18—19; 1969: 151, figs. 302, 304, 340, 479—480. *Syn. nov.*

Material studied. — 5—8 km S of Sérvia, 600 m, 4.vii.1975, J. Duffels, 1 ♂, 2 ♀ (ITZ); Polimilos, 900—1500 m, 7 ♂, 3 ♀; Vevendós-Katafyio, 950—1400 m, 16 ♂, 17 ♀; Mt. Piéria above Katafyio, 1400—1700 m, 1 ♂; 10 km NW of Ftéri, 1500 m, 14 ♂, 10 ♀; Ftéri, 1000 m, 1 ♂; Mt. Olimbos, refuge A, Príoni-Mítikas, 1800—2400 m, 25 ♂, 5 ♀ (all CW); Mt. Olimbos, 1750—1950 m, 10.viii.1973, La Greca, 4 ♂, 3 ♀ (IBA); Leptokariá-Kariá, 500—1000 m, 48 ♂, 29 ♀; Mt. Olimbos above Sparmós, near refuge B, 1800—2300 m, 56 ♂, 59 ♀; Kallithéa, 600 m, 1 ♀; 4 km W of Elassón, 300 m, 1 ♀; Dhimitra-Anatoli, 400 m, 1 ♀; Mt. Óssa above Anatoli, 1250—1400 m, 68 ♂, 26 ♀ (topotypes of *P. thessalicus*); Mt. Pilion above Portaria, 700—1200 m, 2 ♂ & between Portaria and Zagóra, 900 m, 5 ♂, 3 ♀ (all CW).

Diagnosis. — See Ramme (1933).

Variation. — The species is highly variable. Hind margin of pronotum varying from widely rounded to emarginate. Shape of pronotum in lateral view slightly variable (figs. 167—169). Uniformly coloured specimens occur frequently. Black spots of male elytra may be absent. Integument, also of female pronotum and abdomen, always markedly shiny. Apex of male cercus comparatively uniform. The incurvation, however, varies somewhat geographically, e.g., in specimens from the northern part of the range it is more angular than in those from the southern part (figs. 114—121). Basal fold of lower ovipositor valve (figs. 259—262) strong, protruding horizontally, arched upward anteriorly and invariably longitudinally impressed above, forming an elongate groove which is directed anteriorly. The posterior part of the fold is variable and may be developed into a lobe of variable size.

Distribution. — The range covers E Thessalia, adjacent parts of Greek Makedhonía and the Northern Sporádhes.

Localities. — Makedhonía: Kozáni: 5—8 km S of Sérvia, 600 m (Willemse, 1977); Polimilos, 900—1500 m; between Vevendós and Katafyio, 950—1400 m; Mt. Piéria above Katafyio, 1400—1700 (both Willemse, 1977); Piéria: Ftéri, 1000 m; 10 km NW of Ftéri; Mt. Olimbos above Litókhoron, 1750—2400

m; between Leptokariá and Kariá, 500—1000 m (all Willemse, 1977).

Thessalia: Lárisa: Mt. Ólimbos above Sparmós, 1800—2300 m (Willemse, 1974, 1977); Kallithéa, 600 m, 4 km W of Elassón, 300 m (both Willemse, 1977); Lárisa (Ramme, 1933; Harz, 1969); stony hill "Kasabaliotiko" of Mt. Óssa area (Werner, 1933a); between Dhimitra and Anatoli, 400 m (Willemse, 1977); Mt. Óssa (Brunner von Wattenwyl, 1891; Ramme, 1933; Harz, 1969) above Anatoli, 1250—1400 m (Willemse, 1977); Ludrissa (Ramme, 1933; Harz, 1969); Magnisia: Mt. Pilion above Portaria, 700—1200 m (Willemse, 1977) & between Portaria and Zágora, 900 m.

Northern Sporádhes: Skíathos (Werner, 1938); Skópelos (Werner, 1932; Ramme, 1933; Harz, 1964, 1969). (Map 4.)

Remarks. — *P. nitidus* was synonymized with *P. thessalicus* by its author (Werner, 1933a) and by Ramme (1933), but re-established by Harz (1964). The variation of *P. thessalicus*, however, completely includes the characters of *P. nitidus*, so that I propose to synonymize both taxa again.

The species strongly resembles *P. chopardi* and differs from the latter in the shiny integument and in the less raised metazona of the pronotum. The distinction between *P. thessalicus* and *P. zimmeri* is based on the same features and quite often on the male cercus and basal fold of the ovipositor as well.

P. thessalicus lives from the lowlands up to above the timberline and was found on a wide range of plants, sometimes extremely abundant on thistles or stinging nettles. It may occur together with *P. ornatus*, *P. hoelzeli* and *P. macedonicus*.

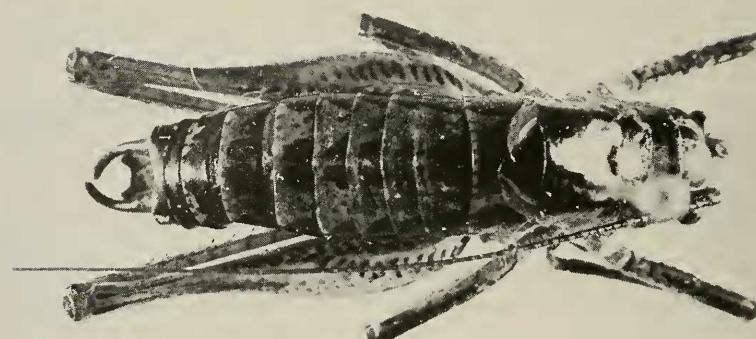
Poecilimon propinquus Brunner von Wattenwyl, 1878

(figs. 122—124, 263—266, map 4)

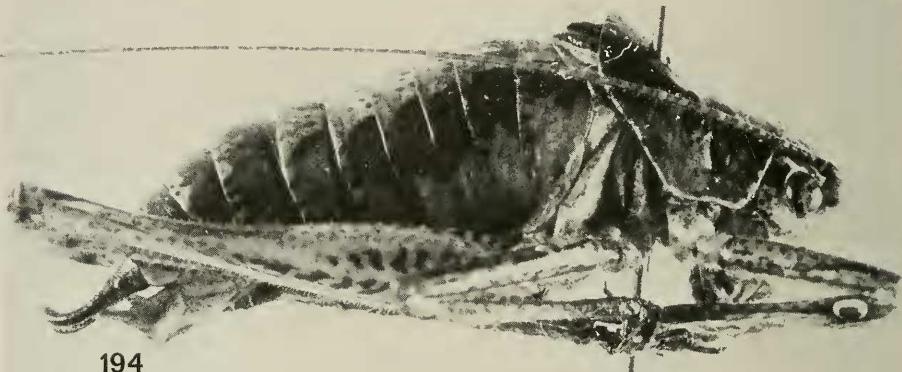
Poecilimon propinquus Brunner von Wattenwyl, 1878: 44 (partim, not Syra & Parnass) (type-locality: Athen); 1882: 267 (partim, not Syra). Werner, 1902: 116; 1927: 428. Ramme, 1933: 553, pl. 6 fig. 41, pl. 10 fig. 52, pl. 11 fig. 42, pl. 12 fig. 32. Werner, 1933a: 402; 1933b: 190; 1934: 323, fig. 1; 1937a: 108; 1937b: 145; 1938: 166. Harz, 1969: 154, figs. 310, 341, 487—493.

Material studied. — Mt. Dírfis above Sténi, 1100—1745 m, 5 ♂, 5 ♀; Mt. Párris, 1000 m, 23.v.1973, A. Malicky, 1 ♀; cap Soúnion, 10—12.iv.1979, M. Dechristier & N. Doneux-Stiernet, 1 ♂, 1 ♀ (all CW).

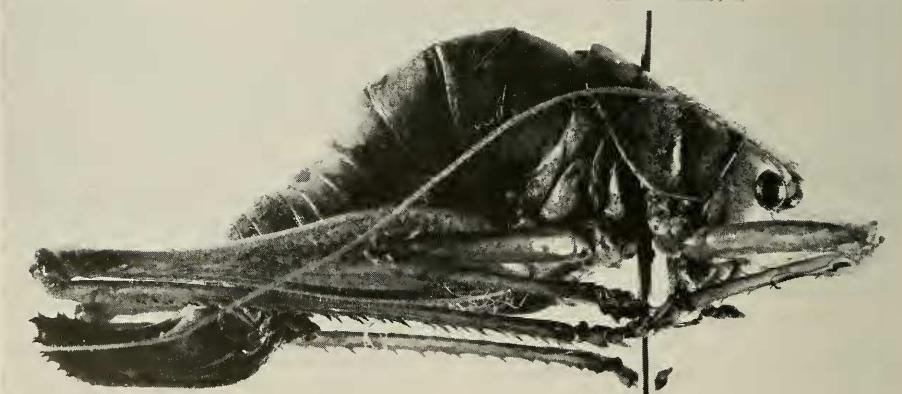
Diagnosis. — See the descriptions by Ramme (1933) and Harz (1969).



193



194

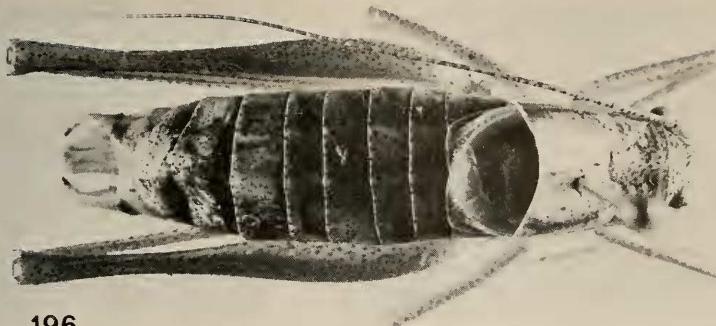


195

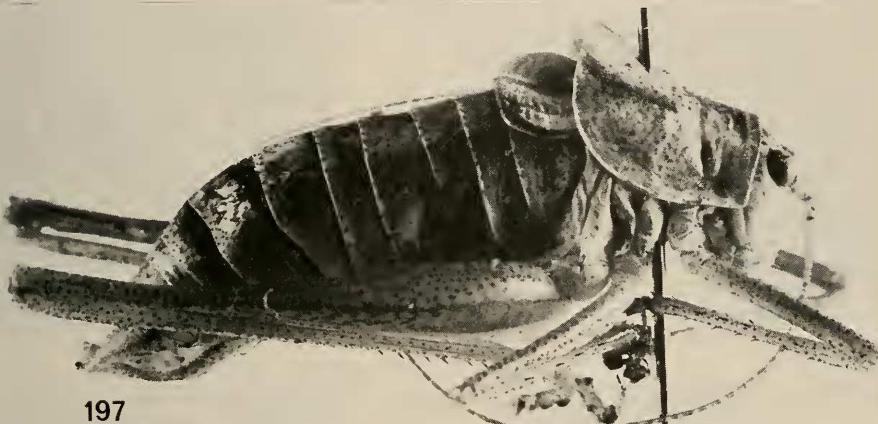
Figs. 193—195. *Poecilimon ikariensis* sp. n.; 193, 194, ♂ holotype; 195, ♀ allotype.

Variation. — This species is known to be quite variable. The cercus of the males before me varies as in figs. 122—124. Further variation has been figured by Ramme (1933). The basal fold of the lower ovipositor valve (figs. 263—

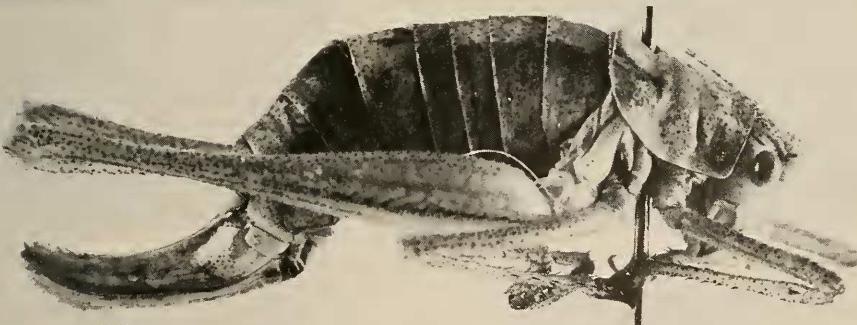
266) is strong, protruding vertically downward, widely arched upward anteriorly, vertically impressed in the middle and forming with the gonangulum an elongate vertical groove, which may cause a narrow or wide incision of the out-



196



197



198

Figs. 196—198. *Poecilimon klisuriensis* sp. n.; 196, 197, ♂ holotype; 198, ♀ allotype.

er margin of the fold and form a pair of lobes.

Distribution. — Confined to Évvoia, Attikí, the adjacent NE part of the Pelopónnisos, and some of the offshore islands.

Localities. — Central Greece: Évvoia: — ("Eubœa") (Werner, 1933b); Khalkís ("Chalkis")

(Ramme, 1933; Werner, 1937a; Harz, 1969); Kími ("Kymi") (Werner, 1938; Harz, 1969); Sténi (Werner, 1937a); Mt. Dírfis above Sténi, 1100—1745 m; Attikí: Athínai ("Athen") (Brunner von Wattenwyl, 1878, 1882; Harz, 1969); Voúla ("Wula") (Werner, 1934, Pankráti (Werner, 1934); Mt. Imittós ("Hymettos") (Werner, 1902, 1927; Ramme, 1933; Werner, 1933a, 1937b); Mt. Párnis, 1000 m; Akr. Sounion; Makronisi

I. (Werner, 1937b); Saronic Is.: Áiyina ("Aegina") (Werner, 1937b, 1938; Harz, 1969).

Pelopónnisos: Korinthía: between Palaiokórinthos and Akrokórinthos (Werner, 1934); Argolis: Galatás (Werner, 1938; Harz, 1969); Spétsai I. (Werner, 1937b). (Map 4.)

Remarks. — The Síros ("Syra") record in the original description refers to *P. aegaeus*, the Parnassós ("Parnass") one to *P. zimmeri*.

Poecilimon aegaeus Werner, 1932 (map 4)

Poecilimon propinquus; Brunner von Wattenwyl, 1878: 44 (only Syra); 1882: 267 (idem).

Poecilimon aegaeus Werner, 1932: 2 (type-locality: Mykonos); 1933a: 403, fig. 1. Ramme, 1933: 552, pl. 7 fig. 19, pl. 10 figs. 51, 51a, pl. 11 fig. 41, pl. 12 fig. 32. Harz, 1969: 151, figs. 337, 481—496.

Diagnosis. — See the descriptions in Ramme (1933) and Harz (1969).

Distribution. — Known only from some islands of the Kíkládhes and Northern Sporádhes.

Localities. — Kíkládhes: Míkonos ("Mykonos") (Werner, 1932, 1933a; Ramme, 1933; Harz, 1969); Síros ("Syra") (Brunner von Wattenwyl, 1878, 1882; Ramme, 1933; Harz, 1969); Tinos (Ramme, 1933; Harz, 1969).

Northern Sporádhes: Skíros, Linariá (Ramme, 1933). (Map 4.)

Poecilimon mytilensis Werner, 1932 (map 4)

Poecilimon mytilensis Werner, 1932: 3 (type-locality: Mytilene). Ramme, 1933: 537, pl. 6 fig. 24, pl. 9 fig. 29, pl. 11 fig. 23, pl. 12 fig. 20. Werner, 1933a: 404, fig. 2; 1934: 324. Harz, 1969: 144, figs. 300, 339, 441—445.

Poecilimon brevicauda Werner, 1932: 3 (type-locality: Lemnos). Ramme, 1933: 537 (as synonym).

Diagnosis. — See Ramme (1933) and Harz (1969).

Distribution. — Known only from the Aegean islands of Lésvos and ? Límnos.

Localities. — Eastern Aegean Is.: Lésvos ("Mytilene") (Werner, 1932; Ramme, 1933; Werner, 1934; Harz, 1969), Lebétimnos Mts. (Werner, 1934); Límnos ("Lemnos") (Werner, 1932; Ramme, 1933). (Map 4.)

Remarks. — *P. brevicauda* is known only from the female type which is considered to be lost (Ramme, 1933). Additional material is wanted to establish its synonymy with *P. mytilensis*.

Poecilimon deplanatus Brunner von

Wattenwyl, 1891

(map 4)

Poecilimon deplanatus Brunner von Wattenwyl, 1891:

27 (type-locality: Kós). Ramme, 1933: 538, pl. 9 fig. 32, pl. 11 fig. 26, pl. 12 fig. 23. Werner, 1936: 11. Harz, 1969: 144, figs. 299, 446—449.

Distribution. — Known only from some islands in the Dhadhekánisos.

Localities. — Dhadhekánisos: Kós (Brunner von Wattenwyl, 1891; Ramme 1933; Harz, 1969); Kásos (Ramme, 1933; Harz, 1969); Kárpathos (Ramme, 1933; Harz, 1969), Mt. Lástos ("Lastrosgébirge") (Werner, 1936). (Map 4.)

Poecilimon sanctipauli Brunner von

Wattenwyl, 1878

(figs. 125, 126, 267—270, map 4)

Poecilimon sanctipauli Brunner von Wattenwyl, 1878: 40, figs. 2a—d (type-localities: Ephesus; Smyrna; Rhodos). Giglio-Tos, 1914: 3. Ramme, 1933: 535, pl. 7 fig. 10, pl. 9 fig. 27, pl. 11 fig. 21, pl. 12 fig. 21. Werner, 1933b: 190; 1936: 10. Jannone, 1936: 145. Beî-Bienko, 1954: 288, fig. 159. Harz, 1969: 144, figs. 436—440.

Material studied. — Turkey: Smyrna, 1 ♀; Ephesus, v. 1901, Werner, 1 ♂ (both CW); Greece: Ródhos, Líndhos, 17—18.iv.1970, A. C. & W. N. Ellis, 6 ♂, 6 ♀ (ITZ; CW).

Diagnosis. — See the descriptions by Brunner von Wattenwyl (1878), Ramme (1933), Beî-Bienko (1954) and Harz (1969).

Variation. — The armature of the cerci of the available males differs slightly from the descriptions in presenting a separately placed pre-apical spine (figs. 125, 126). The basal fold of the lower ovipositor valve is also somewhat variable, though always placed transversely, bulbously inflated in the middle and forming with the gonangulum an elongate vertical groove (figs. 267—270).

Distribution. — This species is known from SW Turkey and some offshore Aegean islands, from Sámós to Ródhos.

Greek localities. — Eastern Aegean Is.: Sámós, Marathókambos (Werner, 1933b; Harz, 1969); Dhadhekánisos: Kós (Ramme, 1933; Harz, 1969), Mt. Díkeo (Werner, 1936); Ródhos (Brunner von Wattenwyl, 1878; Ramme, 1933; Harz, 1969), "Cannamat" & "Phileremos" & Monólithos (Werner, 1936), Líndhos (Jannone, 1936), Ayios Isídhoro (Giglio-Tos, 1914). Kálimnos: Potea (Werner, 1936). (Map 4.)



199



200



201



202



203



204



205



206

Figs. 199—206. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species; 199, 200, *P. ornatulus* (Schmidt) (Eptakhórion); 201, 202, *P. hoelzeli* Harz (Mt. Ólimbos, Refuge B); 203, 204, *P. pindos* sp. n. (Mt. Timfi); 205, 206, *P. gracilis* (Fieber) (Mt. Bela Voda).



Map 1. Distribution of *Poecilimon* species.

Poecilimon hamatus Brunner von Wattenwyl,
1878

(figs. 127, 127a, 271, 272, map 4)

Poecilimon hamatus Brunner von Wattenwyl, 1878:
41 (type-localities: Rhodos; Tireh bei Smyrna).
Werner, 1901: 286. Giglio-Tos, 1914: 3. Werner,
1933b: 190. Ramme, 1933: 538, pl. 9 fig. 31, pl. 11
fig. 25. Werner, 1934: 323, fig. 2a, b (not Ikaria);
1936: 11. Jannone, 1936: 144. Bei-Bienko, 1954:
317. Harz, 1969: 140, figs. 281, 328, 424—426.

Material studied. — Ródhos, Líndhos, 19.iv.1970,
A. C. & W. N. Ellis, 1 ♂, 1 ♀ (ITZ); Náxos, Sífonas,
26.v.1977, A. Malicky, 1 ♂, 1 ♀ (CW).

Diagnosis. — See Brunner von Wattenwyl
(1878), Ramme (1933), Bei-Bienko (1954) and
Harz (1969).

Variation. — The male cercus is known to be
variable, that of the Ródhos male before me is as
in text-figs. 127, 127a. Also the basal fold of the

lower ovipositor valve is variable. A figure of
this structure of the Ródhos female at hand is
given (figs. 271, 272).

Distribution. — Known from the Izmir dis-
trict, W Turkey, from several eastern Aegean is-
lands, from Lésvos to Ródhos, and from the is-
land of Náxos, the Kikládhes.

Greek localities. — Eastern Aegean Is.: Lésvos
("Mytilini"), Mt. Lebétimnos ("Lepetymnosgebirge")
(Werner, 1934); Sámos (Ramme, 1933), Kierki near
Marathókambos (Werner, 1933b).

Dhodhekánisos: Nísiros (Nýsiros (Ramme, 1933);
Ródhos (Brunner von Wattenwyl, 1878; Werner,
1901; Ramme, 1933; Harz, 1969), Mt. Attáviros
("Mt. Attairo") (Werner, 1936), Líndhos (Jannone,
1936), Áyios Isídhoros (Giglio-Tos, 1914).

Kikládhes: Náxos, Sífonas. (Map 4.)

Remarks. — Werner's records (1934) from
the island of Foúrnoi need confirmation.

Map 2. Distribution of *Poecilimon* species.

DOUBTFUL LITERATURE RECORDS

Poecilimon hadjisarandou

Werner, 1938

Poecilimon hadjisarandou Werner, 1938: 167, fig. 4
 (type-locality: Taygetos?). Harz, 1969: 140.

Remarks. — Known only from the male type which, according to the description, is deposited in the Athens Museum. During my visit to this museum (June 1974), the specimen could not be traced. The type-locality, as noted by the author, is doubtful. Due to the insufficient description and lack of any further material, the identity of this taxon is not clear.

Poecilimon geoktschaicus Shchelkanovtsev,
1910

Poecilimon bosphoricus; Uvarov, 1923: 148.
Poecilimon geoktschaicus; Ramme, 1933: 559, 562, pl.

6 fig. 47 pl. 10 figs. 59—60, pl. 11 fig. 48; 1939:
 49. Bei-Bienko, 1954: 343, 353.

Material studied. — U.S.S.R. (in Russian): 2 ♂, 2 ♀ (CW). Greece: Macedonia, Lembet, June 1916, M. Burr, *Poecilimon bosphoricus* Br.W.? det. Uvarov, *Poecilimon bidens geoktschaicus* Shch Ramme det., "Fundort vermutlich falsch, wahrscheinlich Geok-Tapa", Ramme, 1 ♂ (BMNH).

Remarks. — These records refer to material from Lembet and "Happy Valley", both near Thessaloniki. The male before me, labelled Lembet, agrees completely with the Russian material. Both Ramme (1939) and Bei-Bienko (1954) assume that the locality labels have been exchanged with Burr's material from the Caucasus.

Poecilimon sp. Ebner, 1954
Poecilimon sp.; Ebner, 1954: 554.



207



208



209



210



211



212



213



214

Figs. 207—214. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 207, 208, *P. obesus* Brunner von Wattenwyl (Kápsia); 209, 210, *P. beieri* Ramme (allotype); 211, 212, *P. nobilis* Brunner von Wattenwyl (Khrisovitsi); 213, 214, *P. thoracicus* (Fieber) (Túkheron).



Map 3. Distribution of *Poecilimon* species.

Remark. — The record refers to a female from Árta, Ípiros.

Poecilimon sp. Ebner, 1912

Poecilimon sp.; Ebner, 1912: 111.

Remarks. — Refers to juvenile specimens from the island of Kíthira (= Cerigo), off the shore of the southern Pelopónnisos. Hitherto no other record of the genus from this island is known.

REFERENCES

- Bei-Bienko, G., 1954. Orthoptera 2, no. 2. Tettigonoidea. Phaneropterinae. — Fauna U.S.S.R. (Zool. Inst. Akad. Nauk SSR, Moscow) (n.s.) 59: 1—385, figs.
 Berland, L. & L. Chopard, 1922. Travaux scientifiques de l'Armée d'Orient (1916—1918). Orthoptères. — Bull. Mus. natn. Hist. nat. Paris 1922: 166—170, 230—235, figs.

Brunner von Wattenwyl, C., 1878. Monographie der Phaneropteriden: 1—401, figs. — Brockhaus, Wien.

—, 1882. Prodromus der europäischen Orthopteren: i-xxxii, 1—466, figs. — Engelmann, Leipzig.

—, 1891. Additamenta zur Monographie der Phaneropteriden. — Verh. zool.-bot. Ges. Wien 1891: 1—196, figs.

Doflein, Fr., 1921. Mazedonien: i-viii, 1—592, figs. — Fischer, Jena.

Ebner, R., 1912. Zur Kenntnis der Orthopterenfauna von Griechenland. — Verh. zool.-bot. Ges. Wien 1912: 108—113.

—, 1954. Zoologische Studien in West-Griechenland. — Sber. Akad. Wiss. Wien (1) 163: 549—558, figs.

Fieber, F., 1853. Synopsis der europäischen Orthopteren. — Lotos 3: 90—104, 115—129, 138—154, 168—176, 184—188, 201—207, 232—238, 252—258.

Fischer, L. H., 1853. Orthoptera Europaea: i-xx, 1—



Map 4. Distribution of *Poecilimon* species.

- 454, figs. — Engelmann, Leipzig.
 Frivaldszky, J., 1867. Monographia Orthopterorum Hungariae: 1—201, figs. — Eggenberger, Pest.
 Giglio-Tos, E., 1914. Escurzioni zoologiche del Dr. Enrico Festa nell'Isola di Rodi. IX. Dermaptera et Orthoptera. — Boll. Musei Zool. Anat. comp. Univ. Torino 29 (680): 1—7.
 Harz, K., 1964. Orthopterologische Beiträge V. — Ann. naturhist. Mus. Wien 68: 443—451, figs.
 —, 1966. Neues von europäischen Orthopteren. — Mitt. deutsch. Ent. Ges. 25: 21—24, figs.
 —, 1969. Die Orthopteren Europas I: i—xx, 1—749, figs. — Junk, The Hague.
 Harz, K. & A. Kaltenbach, 1976. Die Orthopteren Europas III: 1—434, figs. — Junk, The Hague.
 Jannone, G., 1936. Nuovi contributi alla conoscenza della fauna dell'isole italiane dell'Egeo, 5. Studio bio-ecologico e sistematico dell'Ortottero-fauna con notizie sui Blattodei, Mantodei e Falsoidei. — Boll. Lab. Zool. gen. agr. R. Scuola Agric. Portici 29: 47—248, figs.
 Kaltenbach, A., 1965. Dictyoptera und Orthoptero-
 dea von Nordost-Griechenland und der Insel Thasos. — Annln. naturh. Mus. Wien 68: 465—484, figs.
 Karaman, M., 1958. Neue Orthopteren-Arten aus Jugoslawien, insbesondere aus Mazedonien. — Biol. Glasn. 11: 35—44, figs.
 —, 1961. Beitrag zur Kenntnis der Orthopteren Jugoslaviens. — Fragm. balcan. 4: 37—48, figs.
 —, 1962. *Poecilimon chopardi* Rme (Orthopt. Phaenoeridae) de Macédoine. — Bull. Soc. ent. Mulhouse 1962: (1), figs.
 —, 1974. Beitrag zur Kenntnis der Art *Poecilimon affinis* (Friv.). — Reichenbachia 15: 23—32, figs.
 Kuthy, D., 1907. Insectorum messis in insula Creta a Lud. Biro congregata. I. Orthoptera. — Annls Mus. nation. hungar. 5: 551—555.
 Pančić, J., 1883. Orthoptera in Serbia hucdum detecta: i—viii, 9—10, 1—172 + 1. — Beograd.
 Ramme, W., 1926. Neue und wenig bekannte europäische und asiatische Orthopteren (Acrid., Tettig.). — Dt. ent. Z. 1926: 273—289, figs.
 —, 1927. Die Dermapteren und Orthopteren Sizi-

- liens und Kreta. — Eos 3: 111—200, figs.
- , 1933. Revision der Phaneropterinen-Gattung *Poecilimon* Fisch. (Orth. Tettigon.). — Mitt. zooll. Mus. Berl. 19: 497—575, figs.
- , 1939. Beiträge zur Kenntnis der palaearktischen Orthopteren Fauna (Tettig. u. Acrid.), 3. — Mitt. zool. Mus. Berl. 24, 41—150, figs.
- , 1951. Zur Systematik, Faunistik und Biologie der Orthopteren von Südost-Europa und Vorderasien. — Mitt. zool. Mus. Berl. 27 (1950): 1—431, figs.
- Schmidt, F. I., 1849. (Beschreibung der *Ephippigera ornata*). — Ber. Mitt. Freunden naturw. Wien 6 (9): 184.
- Tarbinskii, S. P., 1932. Materialy k poznaniyu prymokrylykh nasekomykh SSSR. Izv. leningradsk. — Inst. Bor'by s Vreditelyami Sel'skogo i Lesnogo Khozyaistva 2: 181—205, figs.
- Uvarov, B., 1923. A list of Orthoptera of Macedonia with zoogeographical remarks. (In: M. Burr, B. P. Campbell & B. Uvarov, A contribution to our knowledge of the Orthoptera of Macedonia.) — Trans. ent. Soc. Lond. 1923: 142—166, fig.
- Weidner, H., 1950. Bilder aus dem Insektenleben Nordgriechenlands. — Ent. Z. 59 (1949—1950): 141—144, 147—152, 157—160, 162—168, 169—176, 180—183, 190—192.
- Werner, F., 1901. Die Dermapteren- und Orthopterenfauna Kleinasiens. — Sber. Akad. Wiss. Wien (1) 110: 259—306, figs.
- , 1902. Beiträge zur Kenntnis der Orthopterenfauna Griechenlands. — Berl. ent. Z. 47: 111—118, figs.
- , 1903. Ueber die von Herrn Dr. Karl Grafen Attems aus Kreta mitgebrachten Orthopteren. — Verh. zool.-bot. Ges. Wien 1903: 65—69, figs.
- , 1927. Zoologische Streifzüge in Attika, Morea und besonders auf der Insel Kreta. I. Orthopteren. — Abh. naturw. Ver. Bremen 26: 426—431.
- , 1929. Zoologische Forschungsreise nach den Jonischen Inseln und dem Peloponnes von Max Beier, Wien. V. Teil. Reptilia, Amphibia, Orthop-tera, Embidaria und Scorpiones. — Sber. Akad. Wiss. Wien (1) 138: 471—485.
- , 1932. Neue griechische Orthopteren aus dem Gebiet des Aegaeischen Meeres. I. — Anz. Akad. Wiss. Wien 27: 1—4.
- , 1933a. Ueber Orthopteren aus Ost-Griechenland und von den Inseln des Aegaeischen Meeres. — Mitt. zool. Mus. Berl. 18: 395—415, figs.
- , 1933b. Ergebnisse einer zoologischen Studien- und Sammelreise nach den Inseln des Aegaeischen Meeres. II. Orthopteren. — Sber. Akad. Wiss. Wien (1) 142: 185—204.
- , 1934. Dritter Beitrag zur Kenntnis der Tierwelt der Aegaeischen Inseln. — Sber. Akad. Wiss. Wien (1) 143: 313—337, figs.
- , 1936. Ergebnisse einer zoologischen For-schungsreise nach dem Dodekanes, unternommen von Kustos Dr. Otto Wettstein. 1. Orthopteren aus dem Dodekanes. — Sber. Akad. Wiss. Wien (1) 145: 9—16.
- , 1937a. Ergebnisse der vierten zoologischen Forschungsreise in die Aegaeis (1936). — Sber. Akad. Wiss. Wien (1) 146: 89—118, figs.
- , 1937b. Beiträge zur Kenntnis der Tierwelt des Peloponnes, der Inseln Kythira und Euboea sowie der kleinen Inseln im Saronischen Golf. — Sber. Akad. Wiss. Wien (1) 146: 135—153, figs.
- , 1938. Ergebnisse der achten zoologischen Forschungsreise nach Griechenland (Euboea, Ti-nos, Skiathos, Thasos usw.). — Sber. Akad. Wiss. Wien (1) 147: 157—173, figs.
- Willemse, F., 1974. A new subspecies of *Paranocara-cris bulgaricus* (Ebn. & Dren.) from Greece (Orthoptera, Acridoidea, Pamphaginae). — Biologia gallo-hellenica 5: 351—352, figs.
- , 1977. Interesting distribution records of Orthoptera from the Greek mainland and some neighbouring islands. — Ent. Ber., Amst. 37: 52—59, map.
- Willemse, F. & G. Kruseman, 1976. Orthopteroidea of Crete. — Tijdschr. Ent. 119: 123—164, figs., map.



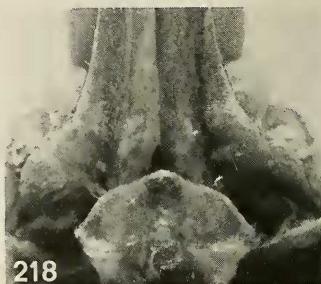
215



216



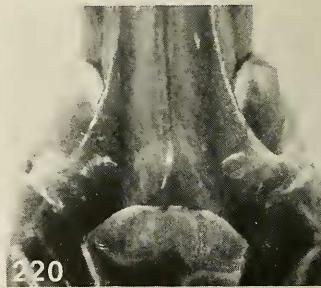
217



218



219



220

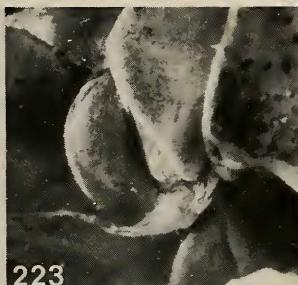


221



222

Figs. 215—222. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 215, 216, *P. laevissimus* (Fischer) (Áno Exánthia); 217, 218, *P. jonicus jonicus* (Fieber) (Dhrosopiyi); 219—222, *P. jonicus lobulatus* ssp. n.; 219, 220, Métsovon; 221, 222, Nikópolis.



223



224



225



226



227



228



229

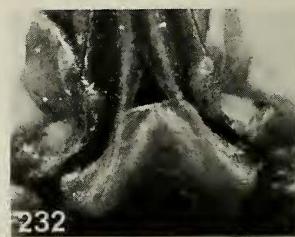


230

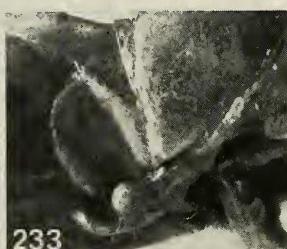
Figs. 223—230. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 223, 224, *P. wernerii* Ramme (Lekhaína); 225, 226, *P. tessellatus* (Fischer) (Khrisovítsi); 227, 228, *P. macedonicus* Ramme (Elassón); 229, 230, *P. brunneri* (Frivaldszky) (Izvor).



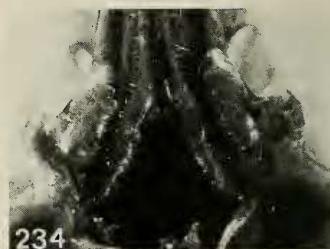
231



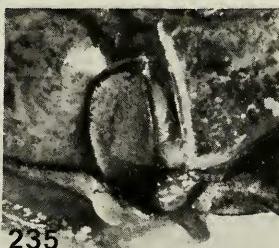
232



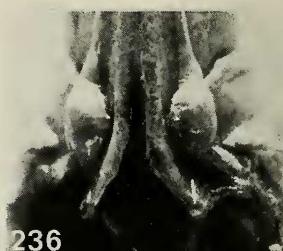
233



234



235



236

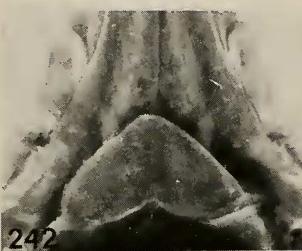


237

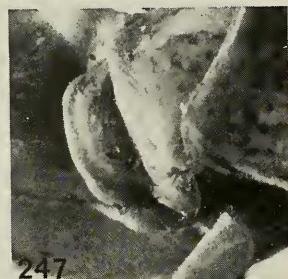


238

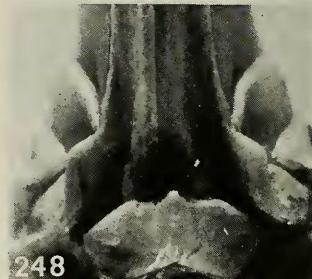
Figs. 231—238. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 231, 232, *P. cretensis* Werner (Mt. Idhi); 233, 234, *P. ikariensis* sp. n. (allotype); 235, 236, *P. syriacus* Brunner von Wattenwyl (Sámos); 237, 238, *P. ebneri* Ramme (Mt. Bela Voda).



Figs. 239—246. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 239, 240, *P. klisuriensis* sp. n. (allotype); 241, 242, *P. zwicki* Ramme (Stavroúpolis); 243, 244, *P. orbelicus* Pancic (Bulgaria); 245, 246, *P. anatolicus* Ramme (Mt. Pangaion).



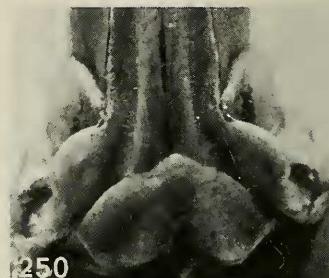
247



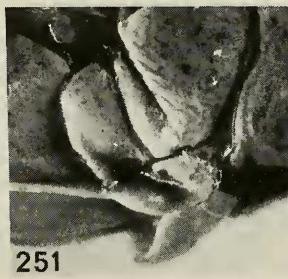
248



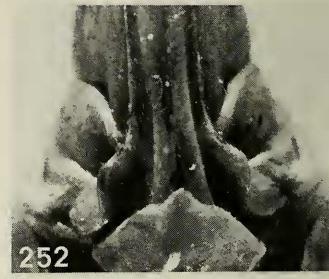
249



250



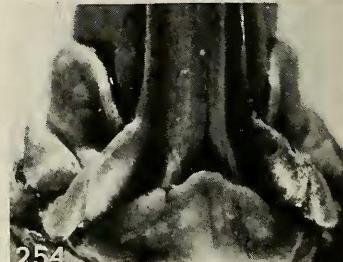
251



252



253

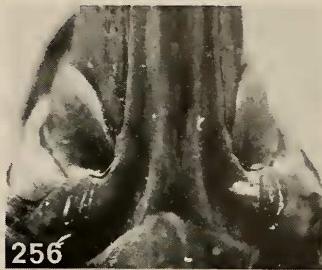


254

Figs. 247—254. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 247—252, *P. chopardi* Ramme; 247, 248, *Paraskeví*; 249, 250, Mt. Timfristós; 251, 252, Paliokhóri; 253, 254, *P. zimmeri* Ramme (Mt. Parnassós).



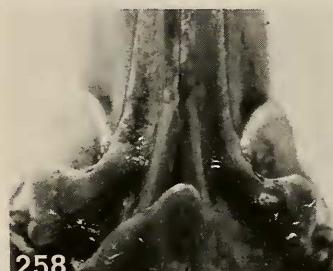
255



256



257



258



259



260

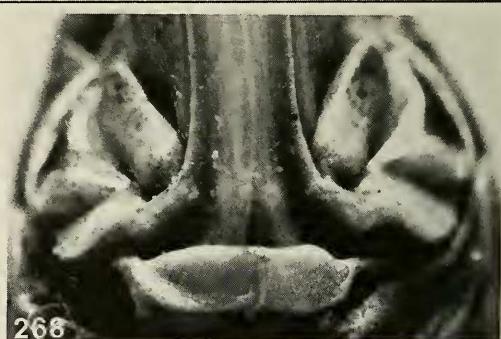
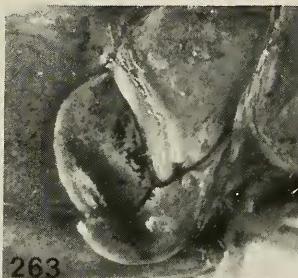


261



262

Figs. 255—262. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 255—258, *P. zimmeri* Ramme; 255, 256, Mt. Panakhaïkón; 257, 258, Mt. Panaitolikón; 259—262, *P. thessalicus* Brunner von Wattenwyl; 259, 260, Mt. Ossa; 261, 262 *Leptokariopsis leptokariensis*.



Figs. 263—270. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon* species: 263—266, *P. propinquus* Brunner von Wattenwyl; 263, 264, Mt. Dirfis; 265, 266, Mt. Párnis; 267—270, *P. sanctipauli* Brunner von Wattenwyl; 267, 268, Smyrna; 269, 270, Líndhos.



271



272

Figs. 271, 272. Lateral and ventral view of the basal fold of the dorsal margin of the lower ovipositor valve in *Poecilimon hamatus* Brunner von Wattenwyl (Lindhos).